

## 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
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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.

## Rehabilitation of patients with injuries of the elbow joint of the upper extremities by telemedicine and artificial intelligence technology

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### Abstract

The international orthopedic community aims to achieve the best possible outcome for patient care by modifying rehabilitation methods and using telemedicine technology. The use of artificial intelligence (AI) has a major role in the implementation of telemedicine technology. The aim of this article is to discuss the integration of telemedicine technology with machine learning algorithm in the rehabilitation of patients with injuries of the upper extremities. A total of 84 subjects with upper extremity elbow joint injuries were enrolled in the study. 48 patients from the control group underwent traditional rehabilitation procedures. A total of 36 subjects were enrolled in the telerehabilitation group. Home remote monitoring for the 36 test subjects included use of a Prototype device with Axis-sensor, temperature and volume sensors, which were fixed to the injured limb. Software with machine learning 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. During telerehabilitation doctor use significantly less time to consult patients (2.3 min – 0.4) than the traditional rehabilitation (12.6 min – 2.9). Patient satisfaction was higher for the telerehabilitation (83.1% – 14.2) than for traditional rehabilitation (33.1% – 8.9). Subjects reported a higher satisfaction with telerehabilitation with machine learning algorithm. The telerehabilitation system with machine learning algorithm improves the quality of life in this group of patients and significantly reduce the cost of the rehabilitation period.



### Biography:

Andriy Tsvyakh has completed his PhD at the age of 42 years from Ternopil Medical University and Doctor of Science degree



at the age of 48 years from Ternopil Medical University. He is the chief of Traumatology and Orthopaedic department. He has published more than 45 papers in reputed journals. He is co-author of one book on traumatology for medical student. 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 skeletal-abdominal 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. "RESULTS OF COMPLEX DIFFERENTIATED TREATMENT OF PATIENTS WITH DIABETIC FOOT SYNDROME."; Bulletin of scientific research vol 2
5. "Surgical tactics in patients with skeletal and abdominal trauma according to immunological status"; published in 2018
6. "Imbalance of cytokine regulation in patients with polytrauma"; Immunology and allergology: science and practice vol 2.

[3rd International Conference on Healthcare Informatics and Wellness](#); webinar - May 11-12, 2020.

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