# Possibilities concerning the telerehabilitation of children with developmental age disorders and evaluation of such a therapy by their parents.



#### Agata Trafalska

Department of Rehabilitation in Musculoskeletal Dysfunctions of the Department of Physiotherapy, Faculty of Health Sciences, Wrocław Medical University, ul. Chałubińskiego 3, 50-368 Wrocław, Poland

E-mail address: agata.trafalska@umw.wroc.pl

# Introduction:

The COVID-19 pandemic has significantly affected the functioning of healthcare systems around the world. Activities in the field of digitization in healthcare have been implemented in many countries for a long time. However, they were significantly accelerated in 2020. In Poland, in response to the pandemic, legal regulations have been introduced. They enabled to use a telemedicine, including e-consultations and telerehabilitation, in a wider range. The need to take advantage of the opportunities in the field of e-health and improvement of health care in this situation has been highlighted. E-prescriptions, e-consultations, e-sick leaves were quickly accepted by the society, while the sense of e-rehabilitation was subjected to long discussions. In response to the raised doubts, the Physiotherapy Evidence Database (PEDro), at the beginning of April 2020, made available collected systematic reviews regarding the effectiveness of telerehabilitation. In official recommendations, in connection with the pandemic and situation of people with disabilities, the WHO appealed: "Provide a telehealth service for people with disabilities. (...) It may concern general needs, as well as rehabilitation needs (...)". A special patient is a child, who (due to the dynamic period of development) often cannot postpone rehabilitation. On the other hand, this is a patient, who requires much more supervision than an adult. Therefore, a therapy requires the involvement of a caregiver.

### Aim:

The purpose of this study was to analyze the possibility of conducting telerehabilitation among children with developmental age disorders (by their parents), as well as to evaluate its course and effectiveness.

#### **Methods:**

The work analyzes the possibilities of telerehabilitation among children in Poland and compares them with reports from other countries. Next to, parents of children who undergone such a therapy were asked about their opinion.

The research was carried out in the years 2021-2022 at the Day Rehabilitation Center of the Provincial Specialist Hospital in Wrocław. A survey was conducted in a group of parents of patients rehabilitated during the pandemic via teleconsultations. The survey included questions about the advantages and disadvantages of telerehabilitation, the evaluation of its effectiveness and further prospects or such a therapy. The survey was correctly filled by 60 people.

## **Results:**

In Poland, as in other countries, there are no standards for telerehabilitation of children, but the demand for such a therapy during the pandemic turned out to be very high. The most frequently used tools for telerehabilitation were WhatsApp and Skype. 56.7% of the respondents were satisfied and 16.7% of parents were dissatisfied with this form of therapy. 60% of the examined people reported that constant contact with a physiotherapist motivated them to carry out systematic exercises with a child at home. Moreover, they emphasized that they could discuss their doubts with the therapist, had a sense of continuity of therapy and appreciated the possibility of adjusting therapy hours to the rhythm of the day. As a disadvantage, 50% of patents indicated the child's lack of willingness to cooperate with a parent and worse focus on home therapy than in the medical institution. 36.7% of the respondents reported problems with the Internet connection or service of the online messenger. 16.7% of parents stated that they did not have adequate conditions for such a therapy at home. Only 6.7% of patients did not see any progress in rehabilitation. 26.7% of people observed a very big improvement and 20% - a big improvement. In the longer time, 3.3% of the respondents declared a desire for exclusive telerehabilitation, 13.3% - would never like to take advantage of this form of therapy again. 36.7% of patient would expect hybrid therapy: some classes in the institution and some classes within the framework of teleconsultations. 46.7% of the respondents reported that telerehabilitation is a valuable supplement when a child cannot come to the clinic for various reasons.

Parents of infants were the most satisfied. They emphasized the importance of the received care tips. The second group of satisfied people constitutes parents of school children, who were clearly interested in new technologies. This form of therapy was rated the worst by parents of children aged 2-4. The reason of such an evaluation was the child's lack of cooperation and problems with the child's attention.

#### **Conclusions:**

- 1. Telerehabilitation can be a valuable supplement to the traditional therapy for children with developmental age disorders.
- 2. To ensure effectiveness, telerehabilitation requires very good cooperation between the therapist and the patient's parents and with the child himself.