



Telerehabilitation in school-age children who stutter: a controlled before and after study to evaluate the efficacy of MIDA-SP



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BACKGROUND

In March 2020, due to **Covid-19** (Ludwig & Zarbock, 2020), the Italian Government has banned any kind of travel throughout the national territory. Faced with this pandemic, the Italian health system had also necessarily to **reorganize the delivery of the services**. In order to ensure continuity of treatment, telerehabilitation was introduced.

Telerehabilitation consists in the delivery of clinical and rehabilitation services through **modern communication technologies**, such as: telephone, email, chat, applications and live-stream videoconferencing platforms, such as Skype (ASHA, 2019b).

There are several **advantages** brought by this different mode of delivery (Coufal, 2017; Covert, 2018; Weidner, 2020):

- removal of geographical barriers
- minimizing the limitations given by mobility
- reduction in costs
- elimination of travel time and waiting time in the waiting room
- overcoming the difficulties given by the finding of resources

PURPOSE OF THE STUDY

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While there are numerous efficacy studies from other countries (eg. Australia, Turkey), in Italy the effectiveness of telerehabilitation in the field of stuttering has never been investigated.

Moreover, international studies have only minimally focused on school age group (7-13 years).

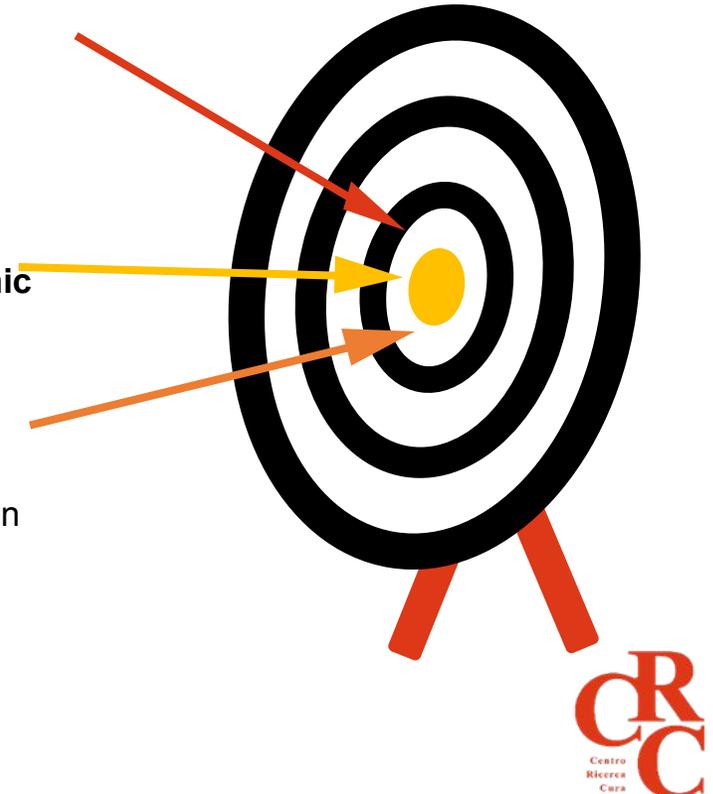
So, the aims of this study are:

1

to compare the effectiveness of **MIDA-Stuttering Program** (Tomaiuoli, 2012) provided in **telepractice** and **in-clinic** therapy delivery in two school age groups

2

To report a **first experience** of telerehabilitation in Italy in the stuttering field



METHOD

Tipology of study

The study is a **non-randomized controlled before and after study**

Participants



Historical control group	
number	8 cws
age	7 - 10.5 years
age mean	8.8 years
sex	7 males and 1 female
treatment	<i>in-clinic</i> MIDA-SP at CRC based in Rome

Experimental group	
number	8 cws
age	6.9 – 10.4 years
age mean	8 years
sex	males
treatment	<i>telehealth adaptation</i> of MIDA-SP

Materials

According to MIDA-SP both *overt* and *covert aspects* were evaluated.

SSI-4

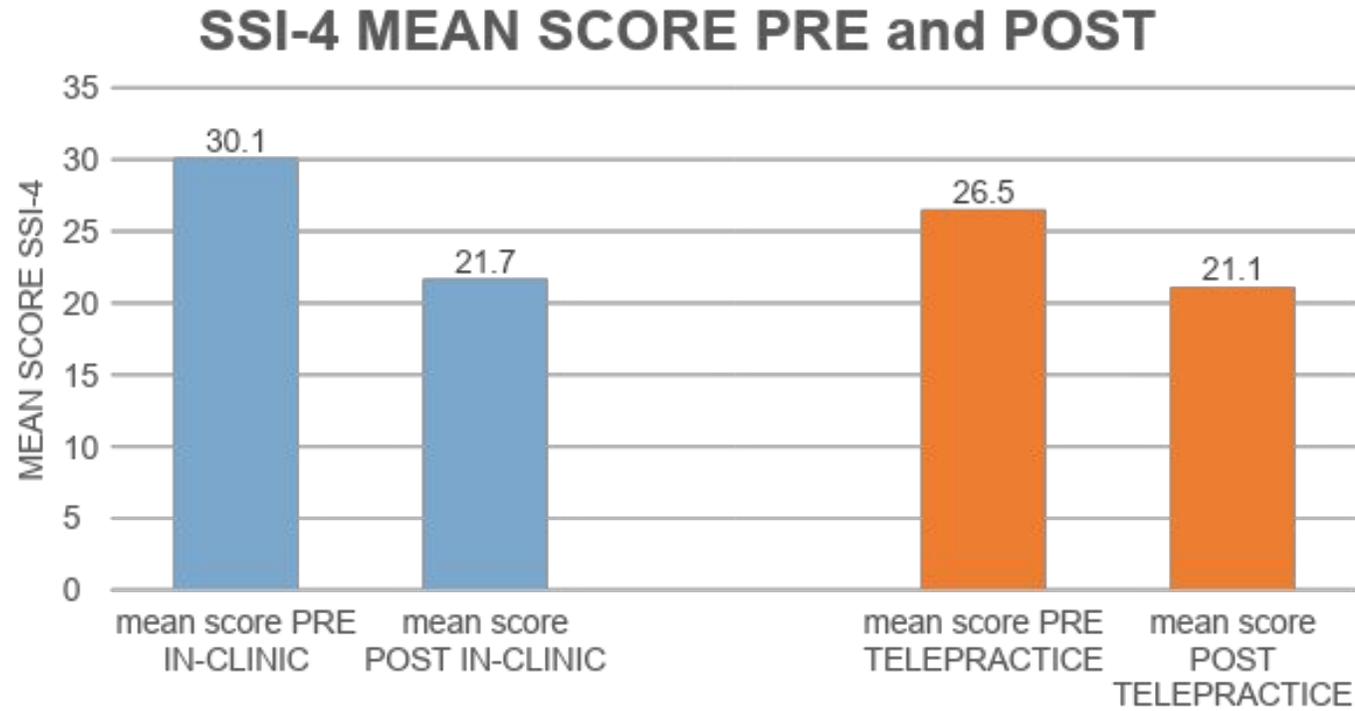
This test measures 4 parameters: *frequency*, *duration*, *physical concomitants* and *naturalness* of the individual's speech in two sample of speech (reading and speaking) (Riley, 2009).

overt aspects

OASES

This questionnaire collects information about *General information*, *Reactions to stuttering*, *Communication in daily situations* and *Quality of life* (Yaruss e Quesal, 2006).

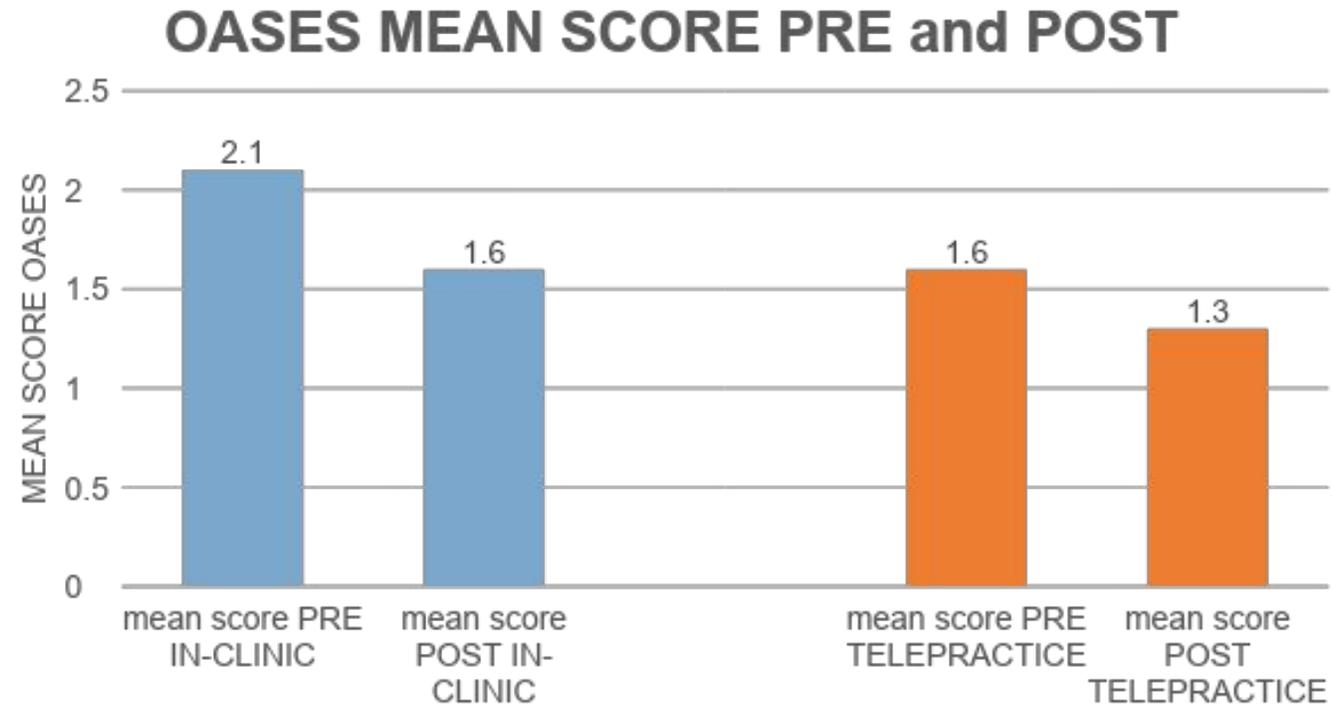
covert aspects



TEST T SSI-4

$t = 0,28$
 $p = 0,7$

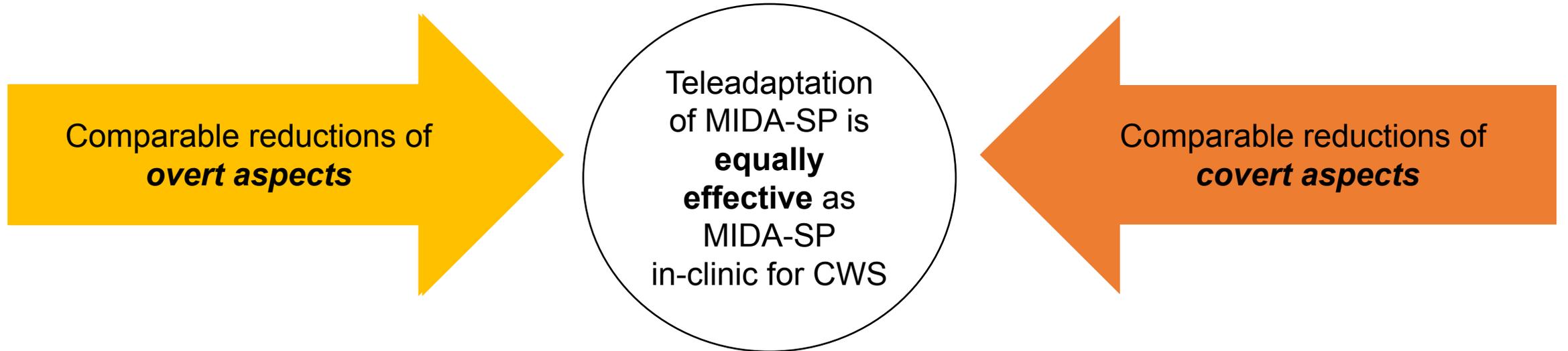
Table 1. SSI-4 mean score pre and post treatment IN-CLINIC and TELEPRACTICE GROUPS



TEST T OASES

$t = 2,3$
 $p = 0,03$

Table 2. OASES Total Score pre and post treatment IN-CLINIC and TELEPRACTICE GROUP



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THANK YOU FOR YOUR ATTENTION

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