

Feasibility and acceptability of telemedicine to substitute outpatient rehabilitation services in the COVID-19 emergency in Italy: an observational everyday clinical-life study

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Abstract

Objective: To investigate the feasibility and acceptability of telemedicine as a substitute of outpatient services in emergency situations like by the sudden surge of the COVID-19 pandemic in Italy.

Design: Observational cohort study with historical control.

Setting: Tertiary referral outpatient Institute.

Participants: Consecutive services provided to patients with spinal disorders.

Interventions: Telemedicine services included teleconsultations and telephysiotherapy. They lasted as long as usual interventions. They were delivered using free teleconference Apps, caregivers were actively involved, interviews and counselling were performed as usual. Teleconsultations included standard, but adapted measurements and evaluations in video and from photos/videos sent in advance according to specific tutorials. During telephysiotherapy, new sets of exercises were defined and recorded as usual.

Main outcome measure(s): We compared the number of services provided in three phases, among them and with corresponding periods in 2018 and 2019: during CONTROL (30 working days) and COVID surge (13 days) only usual consultations/physiotherapy were provided, while during TELEMED (15 days) only teleconsultations/telephysiotherapy. If a reliable medical decision was not possible during teleconsultations, usual face-to-face interventions were prescribed. Continuous quality improvement questionnaires were also evaluated.

Results: During TELEMED, 325 teleconsultations and 882 telephysiotherapy sessions were provided in 15 days. We found a rapid decrease (-39%) of outpatient services from CONTROL to COVID phase ($R^2=0.85$), partially recovered in TELEMED for telephysiotherapy (from -37% to -21%; $p<0.05$), and stabilised for teleconsultation (from -55% to -60%) interventions. Usual face-to-face interventions have been needed by 0.5% of patients. Patients' satisfaction with telemedicine was very high (2.8/3)

CONCLUSION(S): Telemedicine is feasible and allows to keep providing outpatient services with patients' satisfaction. In the current pandemic, this experience can provide a viable alternative to closure for many outpatient services while reducing to a minimum the need of travels and face-to-face contacts.

Keywords: Covid-19; Telemedicine; epidemic; outpatients; telerehabilitation.