

## LETTER TO THE EDITOR

# Experience and results with a telehealth treatment program in patients with cognitive disorders during the COVID-19 pandemic

The COVID-19 pandemic has led to the adoption of social quarantine measures in numerous countries.<sup>1</sup> In this context, both COVID-19 and quarantine can have a substantial impact in the mental health of affected populations.<sup>2</sup> Health care services have had to adapt themselves to this new reality.

Age is the main risk factor for the development of mild cognitive impairment (MCI) and dementia. Older adults are especially vulnerable to severe symptoms of COVID-19 disease, which underlines the importance of optimizing telehealth options for this population. Currently, the evidence in favor of the use of telehealth for people with cognitive impairment (CI) is encouraging but scarce.<sup>3,4</sup> Moreover, the impact of social distancing and quarantine measures on activities of daily living (ADLs) and behavioral and psychological symptoms (BPS) of individuals with cognitive disorders is uncertain, but they are expected to be a particularly vulnerable population. Therefore, there is a need for developing effective strategies to reduce the risk of ADL decline and the onset or worsening of BPS in this population.<sup>5</sup>

The aim of this letter is to present our experience and results with a telehealth treatment program (TTP) in patients with CI during the COVID-19 pandemic.

Prior to the start of the social distancing and quarantine measures, we had different group treatment programs (GTPs) for people diagnosed with MCI or dementia. They consisted of group sessions of cognitive stimulation (CS), music therapy (MT), occupational therapy (OT), and speech and language therapy (SALT). Each session lasted 2 hours for the MCI group and 3 hours for the dementia group. The GTP also included a medical appointment.

After the quarantine measures were instituted in our country on March 2020, a new TTP was proposed to the patients. This TTP consisted of one, two, or three 30-minute phone calls per week (depending on the frequency of the sessions of the GTP) between the therapist and the patient, accompanied by a caregiver. Materials with different activities for CS, MT, OT, and SALT were sent a day in advance via email or WhatsApp. This material was reviewed during the next day session. Additionally, every patient had a telehealth medical consultation.

A Google-Doc questionnaire was sent by email or WhatsApp to the patient's closest family caregiver of the 38 patients who attended our GTP prior to the quarantine and was completed according to their observations of the patients before and after 2 months of the new TTP. The questionnaire consisted of the Barthel Index of Activities of Daily Living (BIADL), the Lawton-Brody Instrumental Activities of

Daily Living (LBIADL) Scale, and Likert scale screening questions for depression and anxiety.

Out of a total of 38 patients attending our GTP prior to the quarantine, 27 (71%) agreed to participate of the TTP. The other 11 patients had no treatment program, and only 3 (27%) had a medical consultation for the 2-month quarantine period. No patients dropped out of the new TTP during the 2-month follow-up period.


The questionnaire was answered by 26 family caregivers out of 38 patients (68% response rate). 19 (73%—response rate 70%) of the patients whose relatives completed the questionnaire participated in the TTP and 7 (27%—response rate 63%) did not. There were no statistically significant changes in the BIADL, LBIADL, nor in the levels of depression or anxiety from the baseline scores to the end of the follow-up period between the patients who chose not to continue with the TTP and those who did.

In our initial experience of 2 months with a TTP for patients with CI during the COVID-19 pandemic, there was a high adherence rate among both patients and caregivers. However, we did not find statistically significant differences between the groups. This could be due to different reasons: lack of efficacy of the new intervention, type 2 error, ADL scales with low sensitivity to change, short time of follow-up, or observer bias.

In summary, considering the immediate need to develop treatment tools that guarantee the continuity of high-quality health care and minimize the risks in this population during the current pandemic, we deem that the field of telehealth treatment for older adults with CI is promising and deserves further exploration.

## CONFLICT OF INTEREST

The authors have no conflict of interests to declare.

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**REFERENCES**

1. Chu DK, Akl EA, Duda S, et al; on behalf of the COVID-19 Systematic Urgent Review Group Effort (SURGE) study authors. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *Lancet*. 2020;395:1973-1987. [https://doi.org/10.1016/S0140-6736\(20\)31142-9](https://doi.org/10.1016/S0140-6736(20)31142-9).
2. Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395:912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8).
3. Goodman-Casanova JM, Dura-Perez E, Guzman-Parra J, Cuesta-Vargas A, Mayoral-Cleries F. Telehealth home support during COVID-19 confinement for community-dwelling older adults with mild cognitive impairment or mild dementia: survey study. *J Med Internet Res*. 2020;22:e19434. <https://doi.org/10.2196/19434>.
4. Moo LR, Gately ME, Jafri Z, Shirk SD. Home-based video telemedicine for dementia management. *Clin Gerontol*. 2020;43:193-203. <https://doi.org/10.1080/07317115.2019.1655510>.
5. Brown EE, Kumar S, Rajji TK, Pollock BG, Mulsant BH. Anticipating and mitigating the impact of the COVID-19 pandemic on Alzheimer's disease and related dementias. *Am. J. Geriatr. Psychiatry*. 2020;28(7):712-721. <https://doi.org/10.1016/j.jagp.2020.04.010>.