

Letter to the Editor



Coronavirus Disease 2019 and Dementia: The Survey for Dementia Patients in COVID-19 Crisis

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The coronavirus disease 2019 (COVID-19) crisis that began last year, has had a disruptive impact on our society.¹ While the impact has affected society in general, it has affected certain groups of individuals disproportionately. Dementia patients are among the most vulnerable individuals in the society, and the COVID-19 crisis has further worsened their susceptibility. Notably, most of them are elderly patients who are vulnerable to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and COVID-19 complications.^{2,3} In order to prevent the spread of SARS-CoV-2 infection, most governments imposed mitigation measures including quarantine and movement restrictions. This confinement significantly limits physical, cognitive, and social activities and has consequently led to the rapid deteriorating of clinical symptoms in dementia patients.⁴ In addition, confinement is associated with several psychological effects, including depression, irritability, and anger, which are likely to have a negative impact on the already burdened caregivers both at home and nursing facilities. The Korean Dementia Association has been very concerned about the consequences of the pandemic on dementia patients and their families and has come up with two measures aimed at developing a strong support system; 1, developing care guidelines for dementia patients and caregivers, and 2, Conducting a survey to identify the extent of COVID-19 impact in dementia patients. The guidelines have already been published,⁵ herein, we report the findings of the survey.

This survey was conducted from August to October 2020, by the researchers who participated in the preparation of the aforementioned guidelines, in the outpatient clinics of their hospitals. The survey participants were dementia patients and caregivers who maintained meaningful cognitive function activities in daycare centers or welfare facilities. This study was approved by the Institutional Review Board (IRB) at each participating center (IRB No. CMC 2020-2693-0001). The survey included socio-demographic characteristics; age, sex, education level, the change of activity, deterioration of cognitive function, and deterioration of abnormal neurobehavioral symptoms before and after the COVID-19 crisis. The change of patients was based on the medical researchers' judgment.

Conflict of Interest

The authors have no financial conflicts of interest.

Author Contributions

Conceptualization: Choi H, Shim YS, Lim JS, Lee CN, Park KW; Investigation: Choi H, Lim JS, Shim YS, Jang JW, Yi S, Na S, Ryoo N; Resources: Choi H, Shim YS, Lim JS, Lee CN, Jang JW, Yi S, Na S, Ryoo N; Writing - original draft: Choi H; Writing - review & editing: Choi H, Lim JS, Lee CN, Jang JW, Yi S, Na S, Ryoo N, Park KW, Shim YS.

The survey included 103 patients, the average age was 80.3 years, 79 patients (76.7%) were female and the average education level was 7.3 years. Sixty-nine patients (67.0%) had mild dementia with Clinical Dementia Rating 1 or less. We categorized the patients into 2 groups: 51 patients had decreased physical activity and 52 patients maintained physical activity for 6 months. According to the medical researchers' judgment, in the group with maintained physical activity, 22 (42.3%) patients showed worsening dementia symptoms while in the group with decreased physical activity 34 (66.7%) patients showed worsening dementia symptoms. Fifty-three (51.5%) patients showed worsened abnormal neurobehavioral symptoms, among them, the common symptoms were depression (n=20, 37.7%), anxiety (n=18, 34.0%), agitation/aggressive behavior (n=16, 30.2%), change in eating habits (n=16, 30.2%) and abnormal behavior at night (n=12, 22.6%).

While our survey was limited by the small sample size, and the rapid progression of some dementias, our results showed a pronounced difference between the two groups, suggesting that physical activity is an important factor in cognitive function maintenance and symptom stability in dementia patients. In addition, our survey findings showed that the active response of the medical staff is necessary, considering the fact that depression, anxiety, and agitation/aggressive behavior are common. This survey has limitations because it included a limited number of patients within a small area, however, it is clinically worthwhile in determining the impact of the COVID-19 crisis on dementia patients. These findings warrant extensive systematic surveys on the consequences of COVID-19 on dementia patients. We hope that this survey will be priming in developing a measure to help reduce the difficulties faced by dementia patients and their families due to the COVID-19 crisis and in taking a more preemptive response to similar pandemic situations in the future.

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