

Physical Activity During the COVID-19 Pandemic

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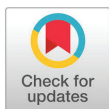
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Since its first report in Wuhan, China, in December 2019, the coronavirus disease (COVID-19) pandemic has significantly influenced our way of living [1]. The World Health Organization proclaimed this disease a global pandemic on March 11, 2020. Since then, the Korean government has implemented social distancing measures. The number of confirmed cases of COVID-19 in Korea had reached 741,000 as of January 25, 2022, with a total of 6,565 deaths.

During the pandemic, several governmental agencies and academic organizations have proposed recommendations for the elderly and those with chronic health conditions. The elderly, especially frail older adults, are more susceptible to negative health consequences. Regular physical activity increases one's immune function [2]. People who have an active lifestyle are less likely to acquire viral infections, and have lower severity of symptoms and mortality rates [2]. Physical activity, such as walking, is crucial in preventing various adverse health outcomes in those with chronic illnesses and the elderly. However, for the elderly and chronically ill, social isolation and fear of acquiring COVID-19 significantly limit physical activity, leading to greater impairment and symptoms of depression [3,4].

High levels of physical activity and immunity, even at old age, can help prevent viral infections and, if infected, lessen the severity of symptoms. Moderate-intensity exercise is promoted by international medical organizations, such as the World Health Organization, to enhance immunity. Even during the COVID-19 pandemic, regular exercise is included as a lifestyle guideline. However, during the pandemic, most of the world's population, including South Korea, is encouraged to stay at home and avoid close contact with family and friends. Access to local amenities, such as gyms and parks, has been restricted to promote social distancing. In Korea, there are no guidelines on promoting physical activity during the COVID-19 pandemic. Academic exercise organizations should teach and advise the population on the benefits of engaging in physical activity, even during a pandemic.

The fitness industry suffered significant financial losses due to the COVID-19 pandemic. However, the importance of exercise and physical fitness management is highly evident today. Performing high-intensity exercises in poorly ventilated indoor spaces may increase the risk of infection. However, rather than considering physical activity as a route of

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spreading COVID-19, government authorities should establish realistic and reasonable guidelines to maintain safety in exercising. Exercise experts and researchers should aim to create an environment that can allow one to maintain a healthy lifestyle through exercising safely amid the COVID-19 pandemic.

References

1. Ciotti M, Ciccozzi M, Terrinoni A, Jiang WC, Wang CB, Bernardini S. The COVID-19 pandemic. *Crit Rev Clin Lab Sci.* 2020; 57(6):365-388.
2. Duggal NA, Niemi G, Harridge SDR, Simpson RJ, Lord JM. Can physical activity ameliorate immunosenescence and thereby reduce age-related multi-morbidity? *Nat Rev Immunol.* 2019; 19(9):563-572.
3. Deng J, Zhou F, Hou W, et al. The prevalence of depression, anxiety, and sleep disturbances in COVID-19 patients: a meta-analysis. *Ann N Y Acad Sci.* 2021;1486(1):90-111.
4. Meyer J, McDowell C, Lansing J, et al. Changes in Physical Activity and Sedentary Behavior in Response to COVID-19 and Their Associations with Mental Health in 3052 US Adults. *Int J Environ Res Public Health.* 2020;17(18):6469.