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Letter to the Editor

Progressive Multiple Sclerosis Patients Requiring Special Attention as a Group at Risk for Coronavirus Infection

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Dear Editor

In January 2020, a novel coronavirus was identified by the Chinese Center for Disease Control and Prevention (CDC) and was subsequently named 2019nCoV (Li et al., 2020). Coronavirus disease 2019 (COVID-19) has spread to many countries in 2020.

Several studies have discussed COVID-19 epidemiology and risk factors. Most affected patients have had mild symptoms and good prognosis, but some develop severe pneumonia or multiple organ failure that cause death.

A study has reported that most adult patients were between 35 and 55 years old. According to a study on early transmission dynamics of the virus, most (59%) patients were male, and their median age was 59 years (Chen et al., 2020).

Overall, half of the patients infected by COVID-19 had chronic diseases, primarily cardiovascular diseases, cerebrovascular diseases, and diabetes. Many results suggest that this disease mostly infects males and older people with chronic comorbidities as a result of a weak immune system (Chen et al., 2020). The majority of deaths were observed among middle-aged and elderly patients with comorbidities, including coronary heart disease, diabetes, hypertension, Parkinson disease, tumor surgery, and cirrhosis (Chen et al., 2020).

Given the global COVID-19 epidemic condition, it is vital to identify and take care of high-risk groups or people with underlying medical conditions, as the mortality could be higher in these groups.

Multiple sclerosis (MS) is a chronic neurologic disease with a progressive nature that is manifested mainly among males and older people, creating a substantial burden on the individual, society, and healthcare system (Marrie et al., 2015).

Although MS is present in all regions of the world, it is more prevalent in Caucasians. The global estimated number of MS patients has increased from 2.1 million in 2008 to 2.3 million in 2013.

Comorbidities such as hypertension, diabetes, hyperlipidemia, ischemic heart disease, chronic lung disease, migraine, epilepsy, and mood and anxiety disorders are common in the MS population. They can affect an individual's disease course and prognosis, resulting in more disability, increased healthcare requirements, and a higher risk of hospitalization and mortality (Marrie et al., 2015).

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Among all individual comorbidities, chronic lung disease, hypertension, and diabetes mellitus were the most common diseases among MS patients, which can increase the risk of COVID-19 infection (Marrie et al., 2015).

On the other hand, the status of MS (progressive vs a relapsing onset course), sex, and age are among the variables associated with higher EDSS (disability and expanded disability status scale) that can increase the risk of infection in MS patients, hence increasing the need for taking more care of these people (Celius, 2017).

Even though there is no treatment for MS, disease-modifying therapies can reduce the number of attacks and decrease the progression of MS (Al-Sakran et al., 2020).

Many immune modulatory drugs prescribed for MS patients do their function by altering the immune system. Subsequently, a significant number of older and disabled MS cases need support from caregivers or their family members through whom COVID-19 might infect them and be at risk of infection with the virus.

Moreover, some MS patients who use second- or third-line drugs that are primarily immunosuppressives might be more at risk of COVID-19 infection (Al-Sakran et al., 2020).

Since MS patients are more at risk of COVID-19 infection, the specific health precautions that may prevent or slow down the transmission of the disease should be considered, including telephone follow-up and home visits; identification, isolation, and follow-up of contacts; training environmental disinfection; and equipping at-risk individuals with personal protective equipment.

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