Case Study: Long Covid Syndrome

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The novel nature of COVID-19 presents unique learning gaps that scientists are on an ongoing mission to fill. COVID-19 is a critical respiratory illness that is airborne and has led to a global health and economic crisis since 2020. The intensity of the disease varies from one person to another, depending on various factors, including an individual’s immune response. Therefore, some individuals are affected mildly, others moderately, while some experience severe symptoms (Raveendran, Jayadevan, & Sashidharan, 2021). Since its global outbreak, COVID-19 has spread rapidly, leading to increased worldwide morbidity and mortality rates. Due to these adverse effects, the world has united in the effort to combat this respiratory illness. Currently, the fight against the virus has shown effectiveness, as reflected in the reduced mortality and morbidity rates compared to 2019 and 2020. However, the virus remains prevalent despite its reduced severity and circulation, and the global effort to control it must continue. The virus is currently manifesting in the form of Long COVID Syndrome, an illness that persists after recovery from SARS-CoV-2 infection (Raveendran, Jayadevan, & Sashidharan, 2021). Therefore, the reduced mortality rate reported in mainstream media is not sufficient to suggest that the virus has been defeated. A majority of individuals experiencing prolonged COVID-19 symptoms after recovery are those who were severely affected by the initial infection. The severity of COVID-19 can lead to the development of long-term health conditions. Some symptoms of Long COVID Syndrome include chest tightness, myalgia, palpitations, cough, fatigue, breathlessness, and brain fog. Based on these symptoms, the syndrome is critical and demands significant attention from both healthcare providers and the public.

**Literature Review**

There exists a wide variety of literature that explains the nature of Long COVID Syndrome. Among this body of research is a study conducted online, targeting individuals who had recovered from COVID-19. It revealed that some participants experienced significant long-term disability and multisystem involvement even after seven months (Davis et al., 2020). Some individuals continued to suffer from cognitive issues and had not returned to work at the time the research was conducted. Thus, Long COVID Syndrome is common among those previously infected with COVID-19. For example, a study in Italy reported that 87% of patients who had recovered and been discharged continued to experience one or more symptoms even after 60 days (Raveendran, Jayadevan, & Sashidharan, 2021). Of this group, more than half reported three or more persistent symptoms. However, the likelihood of developing the syndrome varies and is influenced by an individual's immune system.

COVID-19 is an acute respiratory infection that affects individuals at varying levels of severity, depending on several factors. Some of the conditions influencing the intensity of the virus include obesity, diabetes, heart disease, neurological disorders, nutrient and mineral deficiencies, lung conditions, and chronic kidney disease. In some individuals, symptoms persist even after they have recovered from the initial infection. These individuals are more likely to develop Long COVID Syndrome, a serious condition with morbidity rates comparable to those of SARS-CoV-2.

Obesity, stress, chronic respiratory and cardiovascular disease, and metabolic disorders are among the predisposing factors for Long COVID Syndrome (Naerbo, Rahm, & Ketskés, 2021). Therefore, it is essential for people with these underlying conditions to take proactive measures to reduce their risk of developing the syndrome.

However, Long COVID Syndrome can be managed when patients follow appropriate lifestyle and dietary interventions. For example, adequate intake of vitamin C is important in addressing fatigue, one of the most common symptoms associated with Long COVID (Naerbo, Rahm, & Ketskés, 2021).

COVID-19 tends to be less persistent in younger individuals with strong immune systems, physically fit bodies, and no underlying health complications. This observation has been supported by various studies, including a case study involving a 40-year-old man who contracted the virus. The man was a nonsmoker, indicating a healthy respiratory system, and he engaged in regular physical exercise, which contributed to a healthy weight. In the early stages of the infection, he experienced only mild symptoms, such as fatigue and fever, which resolved within two weeks (Bozicnik, Ketskés, Naerbo, & Rahm, 2021). He received appropriate medical care and fully recovered without experiencing any long-term symptoms.

This case illustrates that regular physical activity, along with avoiding smoking and alcohol, can help mitigate the severity of COVID-19 and reduce the risk of developing Long COVID Syndrome. Maintaining healthy lifestyle habits, such as being a nonsmoker, consuming a balanced diet, and exercising regularly, can help protect individuals from many of the predisposing factors associated with Long COVID.

Fatigue, joint pain, dyspnoea, and reduced quality of life were among the most common symptoms reported by many individuals in Italy who had recovered from COVID-19 but continued to experience lingering effects. Additional symptoms included anxiety, depression, post-traumatic stress disorder (PTSD), skin rashes, headaches, and cough.

These findings indicate that Long COVID Syndrome is a serious condition with significant health implications for recovered patients. Therefore, healthcare providers should prioritize efforts to minimize the long-term impact of the syndrome.

Treatment for Long COVID involves a multidisciplinary approach, including physiotherapy, management of underlying conditions, regular evaluation, psychological support, and occupational therapy (Raveendran, Jayadevan, & Sashidharan, 2021).

**References**

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