

Social Isolation During COVID-19: Are We Facing the Development of a Magnifier for Cardiovascular Risk Factors?

Aislamiento social durante el COVID-19: ¿estamos enfrentando el desarrollo de un amplificador de factores de riesgo cardiovascular?

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In December 2019, in Wuhan, China the new Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), known as Coronavirus disease 2019 (COVID-19), was reported. (1, 2) Since then, the number of patients with the disease rapidly increased worldwide, up to the point that in March 2020, the World Health Organization (WHO) declared COVID-19 as a pandemic. (3)

In the weeks following this announcement, an unprecedented global response took place. Countries around the world started enforcing lockdowns and restrictions, asking people to self-isolate at home to reduce the rate of infections. However, the exponential increase in the past 8 months overwhelmed the health system in many countries around the world, making the lockdown a prolonged situation. Nowadays, there are still no effective and specific therapies or vaccines available for COVID-19 and social isolation is still an ongoing phenomenon.

While these restrictions are helping to decrease the spread of the disease, self-isolation at home has a potential negative effect by limiting normal daily social life, while lockdowns, such as those enforced in Argentina, limit access to physical activity both indoors and outdoors. (4) Moreover, the limited time available to shop for groceries and to make healthy food choices may also have repercussion on healthy habits and lifestyle. Alcohol consumption has also increased during quarantine, potentially increasing the risk of unhealthy habits. (5) Furthermore, cases of depression, anxiety, and chronic stress have become an enormous concern during the COVID-19 confinement. (6, 7) The lack of physical activity, unhealthy diet, alcohol consumption, chronic stress and depression deteriorate the immune system and also increase the risk of cardiovascular disease. (8-11) Such increased health risks are especially alarming while the virus continues to spread throughout the world.

Nowadays, Argentina is one of the top 10 countries in number of positive COVID-19 cases, with a death rate of 2.65% per total reported cases and a continu-

ously growing curve, and additionally the Argentine government has imposed some of the strongest social isolation restrictions in the continent. (12)

Therefore, there is a strong need to study the impact of strict social confinement on healthy habits and mental health during the COVID-19 pandemic. Many national and multinational studies have been performed to analyze the impact of social isolation using online surveys regarding different aspects of healthy habits and psychological wellbeing. (11, 13)

In this issue of the Argentine Journal of Cardiology, Herrera-Paz et al., (14) reported findings from a large online survey about the healthy habits and general psychological wellbeing in the adult population of the Metropolitan Area of Buenos Aires [Area Metropolitana de Buenos Aires (AMBA)] during the period of strict lockdown and social restrictions. The article "Psychosocial Impact of the COVID-19 Pandemic on the Adult Population of Buenos Aires" (14) highlights the importance of physical activity, healthy lifestyle habits and general psycho-emotional wellbeing during the COVID-19 quarantine. This survey analyzes the repercussions of strict confinement on changes in healthy habits such as diet, exercise, alcohol consumption and increased screen time and the repercussions on psycho-emotional health, specifically feelings of fear of infection and of financial losses, frustration, worries and anxiety. The studied population was predominantly individuals within ages of 40 to 60 years, with a high level of education and full-time jobs, approximately 5% of which reported having cardiovascular disease as a preexisting condition. This study has shown that a high percentage of individuals experience the negative effects of self-isolation, such as decreased physical activity and adoption of unhealthy dietary habits. It has also reported that the studied population presents negative psycho-emotional symptoms such as depression, anxiety, sadness, and hopelessness, affecting more those individuals with increased sedentarism. All these mentioned characteristics emerging from social isolation may magnify

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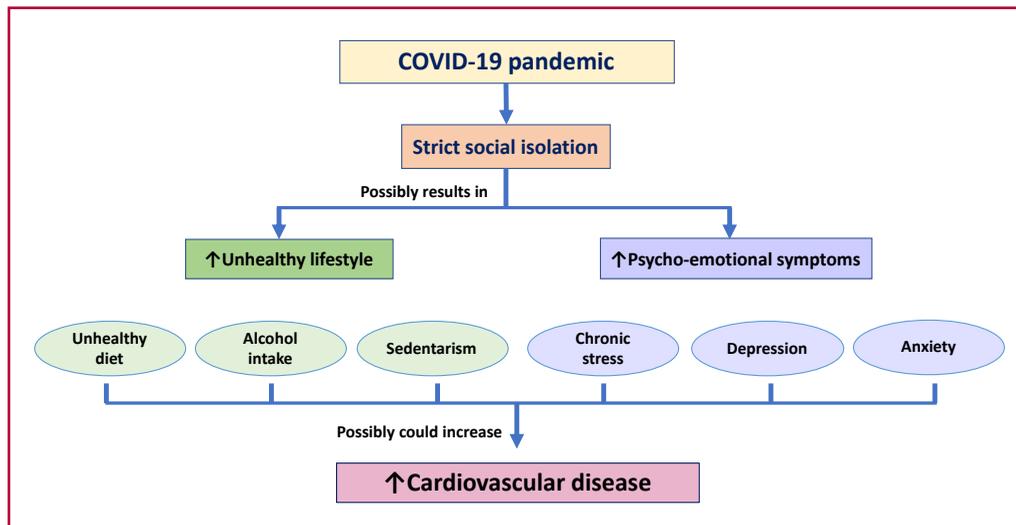


Fig. 1. The potential effect of social isolation on cardiovascular risk factors

cardiovascular risk factors and the incidence of cardiovascular diseases in the future, so there is a strong need to initiate preventive measures. Specially, previous studies have shown that adherence to physical activity and healthy diet improves wellbeing during the lockdown. (15)

Furthermore, the authors suggest that it will be valuable to have better representation of different levels of education and socioeconomic conditions, as it is important to have in consideration the most vulnerable population, that is, people in preexisting unprivileged socio-economic situations and those who have lost their jobs due to the pandemic, worsening their living conditions.

In conclusion, the kind of studies as that of Herrera-Paz et al. represent an invaluable tool that focuses attention on implementing measures to prevent deterioration of healthy lifestyle habits and the potential increase in cardiovascular risk factors. It is necessary to evaluate the consequences of social isolation during the pandemic from a broad and holistic point of view in order to prevent future public health problems, such as the increase of cardiovascular disease.

Conflicts of interest

None declared.

(See authors' conflicts of interest forms on the website/ Supplementary material)

Ethical considerations

Not applicable.

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