

# Use of face masks during COVID-19 pandemic – An opportunity to study the effect on the symptoms of allergic rhinitis

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## Body

To the editor,

The prevalence of allergic rhinitis ranges from 10 to 20% in the general population [1]. Allergic rhinitis is a cause of great economic loss in terms of health expenditure and loss of productivity of people suffering from the disease. Besides this, it also reduces the quality of life of people suffering from the disease [1]. The COVID-19 pandemic has mandated the use of personal protective equipment, especially face masks on a large scale. It is to be noted that the most common allergens like fungal spores (2–50 µm) or pollen (10–100 µm) are larger than the pore size of standard surgical masks (3 µm) and N-95 masks (0.04 µm) [2]. Previous studies have highlighted the cardiovascular benefit of reducing exposure to particulate pollution by using face masks [3] and decreased risk of respiratory infections in the general population by using even simple homemade masks [4]. Another mechanism by which facial mask may reduce the symptoms of allergic rhinitis is by increasing the humidity and temperature of inhaled air, which in turn reduces the nasal responses to allergen provocation [5].

There are several other factors during this current pandemic that may contribute to the reduction in symptoms of allergic rhinitis, for example, advisories on staying at home and reduction in the movement of people, and the reduction in vehicular and industrial pollution owing to reduced economic activity in affected countries. A study conducted by Dror *et al.* [2] found that there was a reduction in allergic rhinitis symptom severity in chronically affected individuals with intermittent disease. On the flip side, face masks may have a negative effect also by either increasing

the allergy owing to the fibers in the face mask or by increasing the respiratory effort while wearing face masks. The pandemic has offered a great opportunity for us to investigate the beneficial effects of facial masks on the severity of allergic rhinitis on a much larger scale, and we recommend multi-institutional studies and pooling of data from these institutions and various stakeholders to study the same.

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## Conflicts of interest

There are no conflicts of interest.

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