



## Use of Face Masks in COVID-19

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*To the Editor:* COVID-19 is triggered by novel coronavirus (SARS-CoV 2) whose infection was reported in China with unexplained cases of pneumonia. This virus transmits through respiratory droplets and fomites. Prevention with rational use of personal protective equipment (PPE) and execution of social distancing measures are imperative to control this pandemic at a community level.

Face masks are non-pharmacological public health interventions which play a vital role in controlling disease spread. There are various kinds of masks available – medical masks, respirators like N95 and non-medical masks like cloth masks. Medical masks are loosely fitted devices worn by an infected person or health care worker to reduce the transmission risk of infectious respiratory droplets in between individuals by cough or sneeze. A respirator is a well-fitted device that protects the user against inhalation of contaminated aerosol material.

Inexpert training, lack of guidance and need for fit testing in case of N95 respirators limit their usefulness. There is no evidence adequately powered about the superiority of N95 respirators in preventing droplet infection vs. surgical masks at a population level. Lately, a well-conducted trial found effectiveness of medical masks to be equivalent to N95 respirators. However, N95 respirators have been anticipated to give better protection against viruses that cause respiratory infections in health care workers [1]. The surgical masks may be able to reduce the infectiousness; it is important to consider the potential role of leakage through the sides of the mask along with direct infiltration of infective viral particles through the mask [2]. N95 causes skin irritation and limits use in pediatric population.

It is important to develop a rational approach to ensure adequate supply for frontline workers in supply chain crisis scenario. At community level, use of non-medical masks like cloth masks are useful to curtail transmission risk. The price disparity between medical masks and N95 respirators question their cost effectiveness at population level. In this pandemic, medical mask supplies should be reserved for health care workers with encouraging people to use cloth masks while going in public. Initiative to educate people on non-inferiority of non-medical masks at community level with a price check on mask vendors is necessary.

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### Compliance with Ethical Standards

**Conflict of Interest** None.

### References

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