





Using Face Masks as a Cheap and Critical Tool in Reducing COVID-19 Spread

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Dear Editor,

China faced the prevalence of a newly diagnosed viral respiratory disease in 2019 (COVID-19). The closure of the Wuhan in China on February 23, 2020, warned seriously the public around the world [1]. The emerging virus caused cough, fever, muscle ache, and shortness of breath in symptomatic patients. The pathogenic particles can be suspended in the air through coughing and sneezing. Obviously, it is essential to take preventive measures and adopt appropriate policies to manage the disease until the vaccine is approved and definitive treatment for COVID-19 is provided [2].

One of the major methods of transmission for COVID-19 is small respiratory droplets. Obviously, asymptomatic people have the potential to easily transmit the disease. In order to reduce the

prevalence of this disease, wearing a mask is very important in addition to distance and social restrictions, such as quarantine. Evidence also suggests that wearing a mask is associated with reducing transmission of contaminated droplets [3, 4].

Most medical and public health experts believe that wearing a mask is effective in preventing the spread of the virus. When talking, when attending in confined spaces with more crowds and less ventilation like elevators and crowded grocery stores, and when using public transportation, such as buses and subways, use of mask is like a savior. The use of mask by the general public is very important to reduce the prevalence of COVID-19, although the use of mask is widely recommended, but the importance of this issue to the public is still not well understood. In a study conducted in New York and Washington [5], it was concluded that using a mask even inefficiently (people with no symptoms), significantly reduces COVID-19 transmission, reducing hospitalization, and even death. Therefore, it is vital to use masks in healthy people to prevent the disease.

On the other hand, using a mask against COVID-19 can play the role of a double-edged sword, because the infected mask itself can be a source of disease transmission. Some people do not know how to use the mask and they easily put their infected hands in contact with the mask and contaminate it. Experts recommend to use the straps of the mask, which are on both sides of the ear, to move it, and it is better for people to wash their hands before contacting the mask



[5]. On the other hand, long-term use of the mask, especially for the elderly, can cause respiratory problems [5].

During the COVID-19 epidemic, resource optimization is essential. Production should be increased, so that the mask becomes available to the public. Lack of attention and protection of vulnerable people in the community, such as patients admitted to hospitals, people with underlying diseases, the elderly in nursing homes, prisoners, homeless children, shelters for the homeless people and villagers can rapidly and severely spread COVID-19 disease [6]. It should be noted that the use of masks can be one of the main components of reducing the disease transmission chain after the removal of social restrictions by the governments [7].

Although many governments around the world have enacted laws to require people to wear masks, there are challenges in the field of mask production. According to a study, the COVID-19 pandemic caused restrictions on the production of masks and personal protective equipment, worldwide. Production capacity will be limited in many countries, especially in the future. Given the conditions of this epidemic, the shortage of quality masks will likely be predictable in the future. Hence, it is expected that the possibility of access to personal protection measures will be increased by government measures [8].

As the evidence shows, the issue of the provision of masks by governments is crucial. Given the unpredictability of the future COVID-19 epidemic, one possible solution to solve the problems of mask supply and to prevent mask shortages is to use household cloth masks instead of medical masks for the public [9]. In this regard, the help of charities can be very effective in solving the challenges related to the preparation of the mask. According to the World Health Organization, no effective and definitive treatment for COVID-19 has been available so far, and the only option available

is the supportive measures of managers and policymakers to cope with the disease [10].

In conclusion, regardless of the negative points, the use of mask with limited protective properties can reduce infection and mortality and can greatly delay the peak time of the epidemic and in particular, reduce the chain of the disease transmission. Therefore, it is necessary to carry out effective planning and decision-making by managers and policy makers in the field of health and to implement appropriate supportive and preventive measures, such as solving problems and challenges related to providing masks and using the voluntary helps of donors.

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Author's contribution

S.B. and F.M. conceived of the presented idea. S.B. and, M. E. wrote the manuscript with support from F.M. All authors read the manuscript and verified it.

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Conflict of Interests

The authors declare that they have no competing interests.

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