
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

# Are social distancing, hand washing and wearing masks appropriate measures to mitigate transmission of COVID-19?

## ¿Son el distanciamiento social, lavado de manos y uso de mascarilla medidas apropiadas para mitigar la transmisión de la COVID-19?

The ongoing global crisis COVID-19 (Coronavirus disease-2019) is caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). It was first reported in Wuhan city, China in December 2019 and rapidly spread to many regions of the world.[1] The most common symptoms are fever, fatigue, sore throat, dry cough, myalgia, and dyspnea. Less common symptoms are headache, dizziness, abdominal pain, diarrhea, nausea, and vomiting.[2] However, asymptomatic cases have also been reported in many countries. As of 11 August 2020, 20.25 million people have been infected and 738,937 deaths reported by the pandemic outbreak of COVID-19.

Prevention of human to human transmission is the most challenging one worldwide since the onset of 1918 influenza pandemic.[3] SARS-CoV-2 spreads mainly through airborne transmission, respiratory droplets and contaminated areas.[4,5] On 11 March 2020 World Health Organization declared the COVID-19 a pandemic.[6] Following that, most countries announced preparedness plans for COVID-19 including lockdown, self-isolation, social distancing, hand washing and wearing face mask.

The rapid spread of COVID-19 was mainly due to pre-symptomatic cases and traveling of cases with or without symptoms. Many countries are implementing social distancing as key containment measures.[7] In a new modeling study in Singapore, Koo and colleagues found that the combined approach of physical distancing interventions, quarantine, school closure, and workplace distancing, is the most effective at reducing the transmission of SARS-CoV-2.[8] A report from the United States suggested that social distancing interventions can give communities vital time to mitigate the spread of COVID-19 pandemic.[9] However, maintaining social distancing in public places (distancing 6 feet away from others) is many times inadequate.[5] Because of population movement in everyday life, maintaining 6 feet distancing in public places such as work environment, restaurants, public transportation and market areas is difficult to comply with distancing. While hand washing can effectively limit transmission of SARS-CoV-2 through indirect contact, hand rubbing with alcohol based hand sanitizers and disinfectants are also recommended to be practiced by infected individuals, their close contacts as well as by the general population. This practice could help lower the risk of COVID-19 transmission.[10] For the general population, the Centers for Disease control and prevention (CDC) recommends wearing of cloth based face masks in public environment to prevent the COVID-19.[11–13] This could help reduce the risk of SARS-CoV-2 transmission from symptomatic as well as asymptomatic cases.[14] In a new study Cheng and colleagues from, Hong Kong, reported that community-wide mask wearing may decrease the spread of this global threat from individuals with subclinical or mild COVID-19.[15]

China put the entire Hubei province under complete lockdown. These measures were recommended to decrease the spread of SARS-CoV-2 in Wuhan city. Likewise, many countries tackled the community spread of COVID-19 with a lockdown and enforcement measures like wearing mask, social distancing and hand hygiene. Hence, older people, sicker people in dense clusters should follow the tight enforcement measures.

Tesyla et al. suggest that information dissemination about COVID-19, which mainsprings individual endorsement of self-imposed prevention measures such as hand washing, mask-wearing, and social distancing, can be an efficacious strategy to take the edge off and delay the epidemic rather than short-lived government initiated intervention strategies such as social distancing and closures.[16] Tesyla et al. revealed that the government initiated enforcement measures with self-imposed interventions caused a pivotal change in reduction of the rate of epidemic and mortality from infection. On the other hand, making the community disease-aware is a crucial

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issue and the fast spread of awareness in the population plays a substantial role in containing the spread of disease. Information, education and communication (IEC) activities provide fast dissemination of COVID-19 awareness on self-imposed intervention strategies among elderly, immunocompromised individuals, or those with no formal education. Social media and mobile based information dissemination has significant impact in fast paced awareness about importance of wearing face mask in public places.[16,17] A strong enforcement measures should be introduced in public places where more individuals gathering such as restaurants, shopping malls, working areas and academic institutions, etc. All these premises may display IEC materials on self-imposed interventions such as wearing face mask, social distancing and hand hygiene.

As of now, many countries are on the way of developing potentially effective therapies and vaccines. There are more than 30 vaccine candidates in clinical evaluation (https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines).

As to potentially effective therapies, there are several trials to assess their safety and efficacy as potential treatments for COVID-19, such as antivirals, systemic interferons, non-steroidal anti-inflammatories, dexamethasone, chloroquine/hydroxychloroquine, and monoclonal antibodies against interleukin-6 (IL-6) and IL-4[18–20] (https://www.ecdc.europa.eu/en/covid-19/latest-evidence/vaccines-and-treatment).

Nevertheless, to overcome this global threat, combination of preventive measures like social distancing, hand washing and wearing face masks are the important key practices to mitigate the transmission of COVID-19 in the community.

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