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Can masks help with reopening the economy?

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KEY TAKEAWAYS

- The United States, China, Austria, Germany and some other countries are now starting to consider recommending or are already requiring that people wear medical masks in public. But the WHO still recommends *against* wearing them as long as you're feeling well.
- Evidence from existing observational studies and randomized trials supports the effectiveness of medical masks in reducing transmission of respiratory infections in a variety of settings.
- Revising recommendations for expanding the use of masks in public areas is justified and may eventually help the economy with transitioning into the post-COVID world.

Even as people follow the rules of social distancing during the coronavirus pandemic, many still ask how they can best keep themselves safe when it comes to grocery shopping or being in situations where others are clustered. Should I wear gloves? And what about masks? Once businesses reopen and people head back to stores and restaurants, will wearing a mask still offer a smart level of protection?

The United States, Austria, Germany and some other countries outside of Asia — where mask use is already much more common — are now starting to consider recommending or are already requiring that people wear simple medical or even home-made cloth masks in public.

But the World Health Organization still recommends against wearing masks as long as you're feeling well. The big reasons, they've argued, is that masks are ineffective and may increase risk to those who wear them incorrectly.[1]

That recommendation deserves reconsideration, especially as policymakers think about what steps can be taken to ensure public safety while allowing more economic activity to resume.

1 World Health Organization, "Coronavirus disease (COVID-19) advice for the public: When and how to use masks" https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks

What the evidence shows

Empirical evidence from existing observational studies and randomized trials supports the effectiveness of medical masks in reducing transmission of respiratory infections in a variety of settings.

Most observational studies, particularly around the SARS outbreak, have found mask wearing protects against infection. The evidence from randomized trials has been more mixed.

Several trials, conducted in community and health care settings, showed that wearing masks — when combined with thorough handwashing — proved to protect against respiratory infections, while other trials found no benefits. In many of these studies, less than 50 percent of participants actually used the protective measures, so that if more people take up these measures in the face of the pandemic, the benefit may be larger than what was found in the trials.

The most comprehensive reviews of the literature on the effectiveness of masks for interruption or reduction of the respiratory virus spread were conducted by Jefferson et al. in a 2011 Cochrane report and MacIntyre and Chughtai's 2015 overview of the evidence.

Both reviews concluded that existing research supports the notion that having people wear masks makes good sense. Even if it can't be measured with absolute certainty how much masks alone are responsible for cutting infection rates, there is no evidence to suggest that wearing a mask is dangerous for one's health. Both reviews acknowledge that the design, sample size, and analyses of the underlying studies are frequently non-ideal, limiting definitive conclusions on effectiveness. Nevertheless, the balance of evidence suggests a benefit of mask use in community settings, including among those who aren't feeling sick, especially when masks are deployed early with respect to exposures and used in conjunction with other measures.

What policymakers can do

As recently pointed out by some scientists following COVID-19, WHO's recommendation against the use of masks by healthy people in community settings is based on the interpretation of this existing body of research as providing no evidence for the effectiveness of mask use in the community (Leung et al 2020; Feng et al 2020). The Centers for Disease Control and Prevention had followed a similar interpretation in the U.S., though both it and the WHO recommend the use of masks for symptomatic patients and health care professionals as effective means of preventing transmission.

While the quality of evidence supporting the effectiveness of masks in health care settings is certainly better, the firm recommendation against masks in community settings appears incompatible with the available evidence.

The strength of the recommendations against wearing masks appear to stem from two additional concerns: that the public would wear masks incorrectly, undermining their effectiveness; and that wide-spread community use would exacerbate mask shortages for health care professionals.

The World Health Organization has indicated that wearing masks incorrectly can increase one's risk of infection. But there is not sufficient evidence to support the notion that people could not wear masks effectively. Many masks are packaged with detailed instructions for how to use them. And online videos could easily be posted to teach people how to wear a mask correctly. The theoretical risk of increasing acquisition of infection, while frequently cited by authorities, does not seem to be supported by a finding of increased risk in any of the available studies.

Appeals to the public not to stockpile masks so as to keep them available for health care professionals have generally not been effective, with widely reported stock-outs and shortages despite such appeals. We speculate that such appeals failed because the general public did not find the argument that masks are ineffective in community settings to be credible.

Moreover, it is possible that initial (and ongoing at the time of this writing) WHO and CDC guidelines against the use of masks in the community by individuals without symptoms may have unintentionally decreased the required sense of urgency and commitment of private and public resources for addressing underlying mask shortages for the general population. The result is that acute shortages of masks undercut even existing CDC recommendations; many individuals who are ill or visiting a health care facility with suspected COVID-19 symptoms cannot obtain masks.

Revising recommendations for expanding the use of masks in public areas is justified by the evidence. And guidelines to wear masks as part of other public efforts — including social distancing — to control the spread of COVID-19 could help steer the production energy and resources of both private and public players to ensuring there are enough masks for everyone.

Supporting the economy

We further speculate that deployment of masks in public areas may eventually help the economy with transitioning into the post-COVID world.

First, masks could prove to be a cost-effective way of trying to reduce re-emergence of the virus in the medium run, as epidemiologic models suggest that virus re-emergence may necessitate re-introduction of social distancing measures with some regularity over the course of next 12 to 18 months (Flaxman et al. 2020). But wearing masks could give some hope of removing the need to put the economy into the switch on, switch off mode — which would require many businesses to close, open, and close again on short notice

Second, once official restrictions on many forms of economic activity are lifted, it is very likely that consumers will be hesitant in returning to their pre-pandemic levels of consumption of goods and services outside of their homes. Consumers' behavioral sentiments are crucial for charting course of economic activity, while prolonged uncertainty may be harmful for firms (Bloom 2009).

Having a mask and knowing how to use it may serve as an extra crutch to help with inevitable consumer anxiety.

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