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Old question with new omicron subvariant: Shall we put the masks back on?

To the editor

As of July 24, 2022, approximately 570 million coronavirus disease 2019 (COVID-19) cases have been reported, and the total number of deaths has surpassed 6.3 million [1]. Omicron BA.5 has accounted for 78% of the newly detected strains in the United States, according to the Centers for Disease Control and Prevention (CDC) report on mutant strain updates as of July 22, 2022 [2].

Despite the continued evolution of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and increased number of breakthrough infections, the protective effects of masks against COVID-19 infection has remained consistent. Recent study found that BA.4 and BA.5, which have mutations L452 and F486, have higher transmission than earlier omicrons, while vaccines developed for earlier omicrons may not provide enough protection against infections new omicron variants, such as BA.4 and BA.5 [3]. Give that the BA.4 and BA.5 have demonstrated the capability of immune escape [3], wearing a mask has become an even more reliable way for individuals to prevent COVID-19 infection and transmission. Previous studies have found that wearing a mask is effective in reducing the risk of COVID-19 infection [4]. Meanwhile, a study found that even with different variants of SARS-CoV-2, wearing a mask still has a protective effect [5]. However, different materials of masks and different ways of wearing masks seriously affect the protective power [6]. So, it is important to choose the mask and wearing method wisely based on specific situations. While wearing a mask, we should also try to avoid 3Cs, namely closed rooms with poor ventilation, crowded places with many people, and close contact such as loud cheering, singing, or intimate conversations [7]. Such non-pharmaceutical intervention (NPI) measures can effectively reduce the rate of SARS-CoV-2 transmission and play significant roles in the prevention of individuals [7].

In short, although new BA.4 and BA.5 with increased immune escape power have led to a new wave of infections, simple NPIs such as wearing mask will not be affected by the new mutations, simply because of the simple physics principles of these measures. The 'old-school' ways, such as wearing masks indoors and reduce gathering whenever possible, will continue to be the effective, easy, and cheap measures to prevent COVID-19 infection.

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