






## Letter to the Editor

# Warnings regarding the potential coronavirus disease 2019 (COVID-19) transmission risk: Vaccination is not enough

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*To the Editor*—Caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the coronavirus disease 2019 (COVID-19) pandemic has continued to spread around the world, resulting in a global health emergency of inconceivable magnitude.<sup>1,2</sup> Currently, several vaccines, including the Pfizer-BioNTech COVID-19 vaccine and the Moderna COVID-19 vaccine, have been authorized for emergency use to prevent COVID-19.<sup>3</sup> A previous study indicated that the use of a vaccine in combination with measures that reduce contact between susceptible individuals and COVID-19 carriers will significantly decrease the per-day risk of infection as long as at least 50% of people receive it.<sup>4</sup> In this article, these researchers also expressed their concern that potential vaccine defiance and abandoning other protection options may cause even worse results in COVID-19 prevention.<sup>4</sup> In addition, due to the limited supply of COVID-19 vaccine in the United States, Centers for Disease Control and Prevention (CDC) recommends that initial supplies of SARS-CoV-2 vaccine be allocated to healthcare personnel and long-term care facility residents.<sup>5</sup> Considering the accessibility of vaccines in different regions and populations around the world, public health policies including keeping social distance and wearing face masks, are still of great importance, even though an effective vaccine has been introduced.

Furthermore, according to *Morbidity and Mortality Weekly Report* from the CDC,<sup>6</sup> several issues still need to be explored: (1) No data assessing the efficacy of vaccine in prevention of asymptomatic SARS-CoV-2 infection are available; thus, the potential transmission risk of SARS-CoV-2 among asymptomatic infected individuals cannot be ignored, even after vaccination. (2) Considering the time interval between the invention of the Pfizer-BioNTech SARS-CoV-2 vaccine and its emergency use authorization (EUA), the long-term effects of this vaccine (including adverse and protected effects) are still not entirely clear, and further surveillance is still necessary. (3) It takes ~14 days to obtain protection from infection after the first shot of Pfizer vaccine,<sup>7</sup> and individuals

may still be susceptible during the first few days to weeks after vaccination, whereas the general public may not fully understand this and may be less compliant with current nonpharmaceutical interventions (NPIs) immediately after receiving the vaccine.

In conclusion, uncertainties remain in the long-term effect of SARS-CoV-2 vaccines, and accessibility of vaccines is still limited. Strict public health policies aiming to reduce the spread of SARS-CoV-2 are still warranted and should not be ignored.

**Financial support.** No financial support was provided relevant to this article.

**Conflicts of interest.** All authors report no conflicts of interest relevant to this article.

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**Cite this article:** Zhao T, *et al.* (2021). Warnings regarding the potential coronavirus disease 2019 (COVID-19) transmission risk: Vaccination is not enough. *Infection Control & Hospital Epidemiology*, <https://doi.org/10.1017/ice.2021.63>