

## COVID-19 pandemic after the vaccine: the importance of continuing to implement basic primary prevention

A pandemia de COVID-19 após a vacina:  
a importância de continuar a implementar  
a prevenção primária básica

La pandemia de COVID-19 tras la vacuna:  
la importancia de continuar implementando  
prevención primaria básica

Andrea Cioffi <sup>1</sup>

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The study of Lima-Costa et al. <sup>1</sup> analyzed the application of social distancing, the use of face masks, and handwashing among participants in the *Brazilian Longitudinal Study of Aging* (ELSI-Brazil) between May 26 and June 8, 2020. The results show a poor application of social distancing but sufficient use of face masks and handwashing. Therefore, it is useful to assess the importance of these preventive measures after the effective vaccination against SARS-CoV-2.

The COVID-19 pandemic has caused multiple problems worldwide, with severe consequences for national health systems and public health <sup>2,3,4</sup>.

Research centers around the world have made considerable efforts to find an effective vaccine against SARS-CoV-2. Nonetheless, a heated bioethical debate concerning the development of the vaccine has taken place. In December 2020, the U.S. Food and Drug Administration (FDA) approved the Pfizer-BioNTech COVID-19 vaccine <sup>5</sup>. In the same month, the European Medicines Agency (EMA) also approved this vaccine <sup>6</sup>. Soon after, in a significant part of the world, mass vaccination programs started.

The Pfizer vaccine (Bnt162b2) is a nucleoside-modified RNA vaccine that encodes a prefusion-stabilized, membrane-anchored SARS-CoV-2 full-length spike protein; it seems that this vaccine can prevent infection with COVID-19 and, to date, it is estimated to be 95% effective <sup>5</sup>.

Nevertheless, doubts about the vaccine's ability to prevent the virus' spread on its own persist. It is yet unclear whether the immunized subjects will be able to infect other individuals. Therefore, it is impossible to say whether the vaccinated citizens will develop any asymptomatic infections and transmit SARS-CoV-2 <sup>7</sup>.

A public health issue of the Pfizer-BioNTech COVID-19 vaccine relates to the need for two doses within 21 days to reach a preventive efficacy of about 95% <sup>5</sup>. Thus, for this timeframe, the vaccinated subject will still be exposed and can potentially spread the infection. Another public health issue may arise if an increasing number of individuals fail to undergo the second vaccine dose. Finally, it is essential to remember any viral variants could make the vaccine less effective or ineffective.

Thus, it is essential to continue to use the preventive measures that, to date, are the only ones that have guaranteed good results in avoiding the spread of SARS-CoV-2: wearing masks, social distancing, and contact tracing <sup>8</sup>. Underestimating the importance of preventive tools could be a dangerous mistake with severe consequences for national health systems. It is imperative to maintain a high level

<sup>1</sup> Department of Anatomical, Histological, Forensic and Orthopaedic Sciences, Sapienza University of Rome, Rome, Italy.

### Correspondence

A. Cioffi  
Department of Anatomical, Histological, Forensic and Orthopaedic Sciences, Sapienza University of Rome, Viale Regina Elena 336, Rome – 00161, Italy.  
an.cioffi19@gmail.com



of attention at this critical stage, at least until the effects of vaccination on global health are apparent and herd immunity is reached. The vaccine is currently considered an additional tool in the fight against COVID-19, not its the final solution. As such, there is a risk that the tool that could help us rise above the health crisis causes a boomerang effect with devastating consequences to public health and national health systems.

### Additional information

ORCID: Andrea Cioffi (0000-0001-5163-9558).

### Conflict of interests

The author declares no conflict of interests.

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