## We are on time

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We have read with special interest your recently published comment. The reluctance to receive COVID-19 vaccine is a significant growing public health concern for its terrible consequences. Currently, we have evidence on the beneficial impact of having a full three-dose vaccination schedule for SARS-CoV-2, expressed in the reduction of the number of hospital admissions, severity of disease, and mortality. <sup>2—3</sup>

Regarding this, we want to comment our personal experience in Spain and the results in our Intensive Care Department. COVID-19 patients admitted in our intensive care unit (ICU) since May 2021, have had the possibility of being vaccinated. At that time, more than 23 million COVID-19 vaccines had been administered in Spain. 48.9% of the population had received at least one dose. Among the age group, 50-59 years, 85.7% had been vaccinated. The vaccination rate was higher than 90% in older groups.4 Between May 1st, 2021, to June 6th, 2021, a total of 30 COVID-19 patients were admitted in our ICU. Among these patients, 23 of them were men, the mean age was 55.4, 20 of them underwent mechanical ventilation, and the mean ICU stay was 10 days. Most of these COVID-19 patients (25/30) were not vaccinated. 68% unvaccinated patients required mechanical ventilation compared to 60% in the vaccinated patients. The overall mortality of these COVID-19 patients was 13.3% (4/30), 20% (1/5) in vaccinated patients and 12% (3/25) in unvaccinated. The mortality rate in the vaccinated group was higher than that in the unvaccinated group, probably due to the small sample size. That's because the period of time selected is the necessary for the discharged patients to have had the opportunity to be vaccinated after admission, given that they had to wait six months from the initial diagnosis of COVID-19 pneumonia.

Of the 22 survivors in the unvaccinated group who were discharged from the ICU. All of them were educated about the benefits of the COVID-19 vaccine, the possibility of having minimized the severity of their infection and preventing their relatives and themselves

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from being through this situation. After this, 100% of COVID-19 patients who were unvaccinated at first are currently fully vaccinated.

Yeneoka et al, identify some characteristics, which leads negative attitudes towards COVID-19 vaccination. The age, media channels such as "Non-medical and Non-government" were associated with the unsure group. Media channels such as "Newspapers or the Novel Coronavirus Expert Meeting", "Medical or Local government", and "Non-TV" were associated with the unwilling group.<sup>5</sup>

In your comment, you are asking about studies focusing on those who hesitated or were denied COVID-19 vaccination due to misinformation or disinformation. Our patients, who required admission in the ICU, intubated and underwent mechanical ventilation, decided to being vaccinated aftermath.

The scientific literature published supports the paramount importance of COVID-19 vaccination. However, one of the best vaccination ambassadors are the ones who, after having suffered the consequences of the disease to the greatest degree, rectifies their decision.

## **Declaration of interests**

We declare no competing interests.

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