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## Addressing COVID-19 vaccine hesitancy: is official communication the key?



Daniel Freeman and colleagues' study published in *The Lancet Public Health*<sup>1</sup> provides insight on possible means to reduce COVID-19 vaccine hesitancy in the general population. In their randomised controlled trial among a large sample (n=18 855) of the UK general population surveyed from Jan 19 to Feb 18, 2021, the authors assessed whether brief written statements about COVID-19 vaccination that addressed personal benefits, collective benefits, safety concerns, or the seriousness of the pandemic could reduce vaccine hesitancy, when added to the National Health Service's official statement on vaccine safety and effectiveness. Their findings might therefore help to optimise official communication, within the blurring context of misinformation on COVID-19 vaccination.<sup>2-4</sup>

First and foremost, the authors found that none of the additional brief statements about COVID-19 vaccination reduced COVID-19 vaccine hesitancy across their whole sample. Although this result might look surprising, it is most likely explained by the rapid success of the COVID-19 vaccination programme in the UK. When participants were surveyed, the UK's vaccination programme had been in progress for 1-2 months, and 11% of the study population had already received a vaccine dose (along with about 14% of the UK general population by the end of January, 2021).<sup>5</sup> Moreover, the willingness to get vaccinated in the UK, which was as high as 72% in October, 2020,<sup>6</sup> had further increased to 83% at the time of the study.<sup>1</sup> Accordingly, the vast majority of the study population had already decided to get vaccinated and thus the additional statements had no further effect on their intentions. Indeed, about 52% of the UK general population had received a vaccine dose by May 8, 2021.<sup>5</sup>

Nevertheless, the careful design of the study, which relied on stratified randomisation by level of vaccine hesitancy, allowed the authors to explore results specifically for the shrinking minority of vaccine-hesitant people in the UK. The authors found that additional brief statements about COVID-19 vaccination might be effective in the most strongly hesitant people, comprising 9% of the study population, who had reported that they would avoid being vaccinated for as long as possible or

would never get vaccinated. However, these statements were only effective when they addressed the individual benefit-risk balance of COVID-19 vaccination (ie, providing information on the risks of COVID-19-related health problems in the long term, or directly addressing safety concerns about the speed of development of COVID-19 vaccines). By contrast, none of the statements that highlighted the collective benefits of vaccination (ie, benefit of not spreading the virus to others, or benefit to society of individuals not getting ill) or seriousness of the pandemic in the UK (ie, the high number of hospital admissions and deaths compared with influenza) changed the attitudes of strongly hesitant people.

It is important to note that the effects of such statements might differ among the strongly hesitant. On the one hand, strongly hesitant people include believers in COVID-19 conspiracy theories, who have been found to be primarily concerned by their own safety rather than the safety of others.<sup>7</sup> These people (ie, those who would avoid being vaccinated for as long as possible) might be sensitive to reassuring arguments on the individual benefit-risk balance of vaccination. On the other hand, strongly hesitant people also include anti-vaxxers, who have been found to be insensitive to communication about both individual and collective benefits of COVID-19 vaccination.<sup>8</sup> Accordingly, these people (ie, those who say they will never get vaccinated) are likely to remain insensitive to any additional arguments on the benefits of vaccination.

We might assume that among strongly hesitant people, the proportion who wish to postpone COVID-19 vaccination (vs anti-vaxxers) is correlated with the proportion of people willing (vs unwilling) to get vaccinated at the country level. In countries with a similarly rapid and successful vaccination campaign as the UK's (eg, the USA and Israel, in which 46% and 63% of the general population, respectively, had received at least one COVID-19 vaccine dose by May 9, 2021),<sup>5</sup> COVID-19 vaccination is becoming the social norm, and a large proportion of strongly hesitant people who have postponed their decision might be further convinced by a positive reinforcement from official communication about vaccination. In countries with early reluctance

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about COVID-19 vaccination,<sup>8</sup> distrust in information from official sources,<sup>9</sup> and slow growth of vaccination coverage (eg, only 26% of the French population had received a vaccine dose by May 8, 2021),<sup>5</sup> a large proportion of strongly hesitant people might be anti-vaxxers and reinforcing the official communication about vaccination might not only be ineffective but even counterproductive.<sup>10</sup> Additional input from social sciences are urgently needed in these country settings if the ultimate goal is to reach herd immunity by mass vaccination.

We declare no competing interests.

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