Willingness to vaccinate against COVID-19 in Australia

More than half of the world's population faces long-term restrictions as the new normal to prevent the spread of COVID-19. If a vaccine becomes available, it might be possible to develop herd immunity and protect those who are most vulnerable to serious consequences of COVID-19. The population coverage required to achieve herd immunity through vaccination varies across diseases and is dependent on the basic reproduction number (R_0).[1] Modelling estimates R_0 to be around 2·5 for severe acute respiratory syndrome coronavirus 2 when no restrictions or physical distancing measures are in place,[2] and R_0 reached almost 4·0 in Wuhan in early-mid January, 2020.[3] Vaccination uptake for herd immunity would need to be at least 67% with an R_0 of 3·0.[1] In their Comment, the COCONEL Group reported that 26% of French adults would not accept a COVID-19 vaccine.[4] We similarly explored this question among a diverse sample of Australian adults.

We conducted an online survey of 4362 Australians aged 18 years and older during April 17–21, approximately 4 weeks after lockdown measures had been activated in Australia and at a time when potential deaths and health system capacity were still of great concern. We asked participants about actions or intentions toward the flu vaccine ("I have or I will get the flu vaccine this year") and a potential COVID-19 vaccine ("If a COVID-19 vaccine becomes available, I will get it").

In this sample, 630 (14·4%) participants said they would not get the flu vaccine this year, 394 (9·0%) were indifferent, and 3338 (76·5%) said they have or will get the flu vaccine this year. For a COVID-19 vaccine, 213 (4·9%) said they would not get the vaccine, 408 (9·4%) were indifferent, and 3741 (85·8%) said they would get the vaccine if it became available. Individuals who said they would not get a COVID-19 vaccine were more likely to believe the threat of COVID-19 has been exaggerated (43·7% [93/213]) than those who said they would get the vaccine if it became available (11·5% [429/3741]) and those who were indifferent (19·9% [81/408]). Inadequate health literacy and lower education level were significantly associated with a reluctance to be vaccinated against both influenza and COVID-19 ($p<0·001$; appendix). Notably, a high proportion overall were confident in the state (75·4% [3288/4362]) and federal (65·2% [2845/4362]) government's response.

In Australia, attitudes towards a COVID-19 vaccine appear to be more positive than reported in France in late March,[4] which might in part reflect greater confidence in the government. However, our data show efforts are needed to target vaccine education to those with lower education and health literacy.[5] It remains to be seen whether Australia's high intentions towards vaccine uptake will remain when restrictions are relaxed and the immediate perceived threat diminishes.

We declare no competing interests.

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See Online for appendix