COMMENTARY

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COVID-19 vaccine demand protest might have increased vaccine acceptance and uptake in South Africa

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ABSTRACT

Safe and efficacious COVID-19 vaccines exist, but their success against the disease depends on public willingness to receive them. Vaccine hesitancy is one major obstacle to the achievement of herd immunity. On 25 June 2021, about 2000 supporters of the Economic Freedom Fighters (EFF) (the third biggest political party in South Africa) marched to the offices of the national regulatory authority (NRA) supporting COVID-19 vaccination and demanding approval of two additional vaccines (Sputnik V and Sinovac) in South Africa. The march was led by EFF leader, Julius Malema. By then, only three COVID-19 vaccines had received emergency use authorization in the country—the Janssen, AstraZeneca and Pfizer-BioNtech vaccines. It is worth noting that NRAs should only approve a vaccine if they are satisfied that its benefits outweigh any potential risks and not through political pressure. Nevertheless, we believe that this march might have increased COVID-19 vaccine acceptance and uptake among EFF supporters. The endorsement of COVID-19 vaccines by Malema, an influential political figure in South Africa, probably convinced some vaccine hesitant South Africans that COVID-19 vaccination is important. Therefore, we suggest vaccine endorsement by influential individuals in South Africa as one of the strategies to increase COVID-19 vaccine uptake.

Coronavirus disease 2019 (COVID-19), caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has produced a devastating pandemic of the proportion that few would have imagined when the virus was first detected in Wuhan city in China in December 2019.^{1,2,3,4,5} Many countries around the world implemented different strategies to control the spread of the virus, including hand sanitization, social distancing, partial or complete lockdowns, closure of schools and businesses, and wearing of facial masks.⁶⁻⁸ Although the measures were able to slow down the spread of the virus, vaccination is the most effective public health intervention for controlling and eliminating the spread of COVID-19.⁹ Efforts were made worldwide to rapidly develop vaccines and therapeutics against COVID-19. Annually, an estimated four million deaths are averted with vaccination across the globe.¹⁰ Vaccination programs have led to the global eradication of smallpox, and significant reductions in disability and death from mumps, hepatitis B, polio, measles, tetanus, rubella, and diphtheria.^{11,12}

The massive explosion of research to find therapeutics and vaccines led to several vaccines receiving emergency use authorization by 2021.¹³ In South Africa, the first COVID-19 vaccine authorized by the South African Health Products Regulatory Authority (SAHPRA) was AstraZeneca (ChAdOx1 nCoV-19 (AZD1222)) in January 2021.¹⁴ However, the vaccine was not rolled out in the country after it was discovered that it had low efficacy against the B.1.351 variant, the dominant variant in the country at the time. Currently, there are two vaccines authorized by SAHPRA

against COVID-19 which are in us in South Africa, namely, the Pfizer (BNT162b2) and Johnson & Johnson (J&J) (Ad.26. COV2.S) vaccines. The J&J vaccine is administered as a single dose, while Pfizer is given in two doses. As of 15 March 2022, there were over 32 million doses of vaccines administered in South Africa.¹⁵

Although several vaccines were rapidly developed, approved, and rolled out, the success of these vaccines against COVID-19 depends on public willingness to receive the vaccination.¹⁶ For the vaccination programs to be successful, high levels of vaccination uptake are required and if a sufficient proportion of a population is vaccinated, protection is also provided to the unvaccinated individuals through herd immunity. In order to obtain vaccine-acquired herd immunity, it is essential that the vaccination coverage of the population remains above specific threshold values.¹⁷

Vaccine hesitancy, a motivational state of being conflicted about or opposed to getting vaccinated,¹⁸ is one major obstacle that hinders the achievement of herd immunity.¹⁹ Resistance to vaccinations is not a new phenomenon, it dates back to the era of smallpox vaccination.²⁰ In 2019, the WHO identified vaccine hesitancy as one of the top 10 threats to global health.^{21,22} Emerging international evidence on COVID-19 vaccine hesitancy suggests that there is a range of reasons for this reluctance, including doubts about the safety and efficacy of the vaccine, mistrust of politicians or the pharmaceutical industry, belief in natural immunity, and the belief that the virus is mild or not life-threatening.^{23,24} A rapid systematic review of 126 surveys conducted in 31 countries by October 2020, found

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declining global willingness to accept the vaccine, from greater than 70% in March 2020 to less than 50% in October 2020.²⁵ In South Africa, a systematic review of surveys conducted between February 2020 and March 2021 found that willingness to accept COVID-19 vaccines ranged between 52% and 82%.²¹

On 25 June 2021, about 2000 people wearing effigies of the Economic Freedom Fighters (the third most popular political party in South Africa) marched to the offices of SAHPRA, demanding the approval of two additional COVID-19 vaccines in South Africa.²⁶ The march was led by the Economic Freedom Fighters (EFF) President, Mr Julius Malema.²⁶ The aim of this march, themed "March to Save Lives," was to support COVID-19 vaccination and to pressure SAHPRA to approve the Sputnik V²⁷ and Sinovac²⁸ vaccines for use in South Africa. During this march, Mr Malema was quoted as saying: "Our demands are simple: we want vaccines. All we are saying is bring more so that we can vaccinate more of our people ... We are here for one simple thing, the rest of the writing is just English, we want other vaccines besides J&J and *Pfizer* [*sic*]".²⁶ It is possible that this public political support for vaccination led to an increase in willingness to accept COVID-19 vaccines and may have increased actual uptake of COVID-19 vaccines among EFF members and Mr Malema's supporters. We speculate that EFF supporters who were hesitant before the march were convinced to accept the vaccines after witnessing the public endorsement of COVID-19 vaccines by their party and their leader. The EFF, as the third largest political party in South Africa, has 53 members of parliament (out of 400) and a large number of supporters.²⁹ In addition, Mr Julius Malema is a very popular and influential politician in South Africa. He is also one of the most-followed people on Twitter in the country, with 3.6 million followers as of 13 December 2021.³⁰ In 2011, he was also named one of Africa's 10 most powerful young men by international business magazine Forbes.³¹

According to Romaniuc and colleagues,³² vaccine hesitancy could result from social influences such as one's beliefs about what others approve or disapprove of, or direct observation of others' behavior. A review done by the WHO working group on behavioral and social drivers of vaccine uptake also identifies social processes, including social norms about vaccination and receiving recommendations to be vaccinated, as a key determinant of vaccine acceptance and uptake.³³ In addition, a large amount of literature in cultural evolution shows that people tend to learn from and copy the behaviors of highly respected individuals.^{32,34} People also tend to be more sensitive to social information provided to them by prestigious individuals.³² A nationwide study conducted in Indonesia on promoting vaccination found that tweets by celebrities about vaccines were 72% more prone to be liked or retweeted than similar tweets by non-celebrities.³⁵ The behavior or public statements made by influential individuals can influence the behavior of the general population either in favor of or against vaccination.32

Vaccination endorsement by opinion leaders and other influential individuals is known as a potentially effective response to vaccine hesitancy.³² Celebrities and famous politicians are instrumental in spreading both pro-vaccination and anti-vaccination news.³⁶ Several governments have used the

endorsement of vaccines by celebrities as a strategy to increase COVID-19 vaccine uptake.³⁴ The use of celebrities to increase vaccine uptake is not a new phenomenon, but we think it has been under-utilized. In October 1956, Elvis Presley took his polio vaccine during the "The Ed Sullivan Show" to encourage uptake among teenagers.³⁷ Fast forward to 2021, many celebrities, including Joan Collins, Samuel L. Jackson, Sir Ian McKellen, Willie Nelson, Tony Bennett, Jane Fonda, Sean Penn, and Jeff Goldblum publicized their COVID-19 vaccinations by sharing photos of themselves getting vaccinated, or publicly revealing that they have been vaccinated, to encourage vaccination against COVID-19.37 With full COVID-19 vaccination coverage in South Africa still hovering around 50%,¹⁵ we suggest using endorsement of vaccination by influential individuals as one of the strategies to increase COVID-19 vaccine uptake in the country. Other strategies that are known to increase vaccination uptake include health education programs, reminders, prompts, financial incentives, training of healthcare providers, audit and feedback, and outreach interventions.³⁸⁻⁴⁰

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