

## Optimising influenza vaccination during a SARS-CoV-2 epidemic in South Africa could help maintain the integrity of our healthcare system

**To the Editor:** The novel infectious disease coronavirus disease 2019 (COVID-19), first reported in late December 2019 in Wuhan, China, seems increasingly unlikely to be contained, resulting in the first pandemic of this decade. Approximately 81% of those infected develop a relatively mild respiratory illness only. While this is good news, the risk of severe disease is higher for the elderly and persons with chronic illness.

The cause of COVID-19 is a virus newly seen in humans, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As it spreads globally through a population that lacks any (even partial) immunity from vaccination or past infection, it will cause a 'virgin soil' epidemic. Even with a relatively low case fatality rate, the sheer number of potential infections may give rise to significant morbidity and mortality and may overwhelm already strained healthcare systems.

As the pandemic spreads and has now been declared officially, the goal of public health measures will be to spread out the epidemic curve: the flatter and broader it becomes, the less acute the burden on the healthcare system. If the first epidemic wave of COVID-19 coincides with the influenza season, it will cause an even higher peak in seasonal respiratory tract infections and hospital admissions, and push healthcare systems to breaking point.

In order to maintain the integrity of South Africa (SA)'s healthcare system at a time that is likely to coincide with our winter influenza season, one important measure will be to optimise influenza vaccination of healthcare workers and high-risk patients to reduce the likelihood of a 'double hit'. Adults in high-risk groups for invasive pneumococcal disease, such as those with HIV and other causes of immunosuppression, should also receive pneumococcal conjugate vaccine. While the influenza vaccine is not perfect, it reduces

the risk of infection and severe influenza illness. Fewer patients with respiratory complaints and more healthy staff at work would be of great benefit if SARS-CoV-2 and seasonal influenza strike simultaneously. In addition, vaccinees are less likely to be flagged as potential COVID-19 cases, decreasing the need for isolation and laboratory testing. While (as always) there will not be enough influenza vaccine doses available in SA to cover all groups for which vaccination is recommended, the harsh reality is that even this limited supply tends not to be used in its entirety.

Reducing morbidity and mortality through better influenza vaccination uptake might be one good thing to come out of this new public health threat, and help the country maintain the integrity of its healthcare system.

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