

LETTER TO THE EDITOR

Decline in invasive pneumococcus diseases while combating the COVID-19 pandemic in Taiwan

Dear Editor:

SARS-CoV2 (COVID19) is the novel coronavirus that is currently causing the critical public threat worldwide. COVID19 is transmitted through at least droplet and contact transmission routes.¹ Since the start of the COVID-19 pandemic, the Taiwan government has taken many proactive and aggressive actions to prevent the transmission of COVID-19, and there are still fewer than 400 confirmed cases of COVID-19 to date. These proactive strategies include wearing a facemask. A pooled analysis of observational studies based on the experience of severe acute respiratory syndrome (SARS) in 2003 disclosed the benefit of wearing masks

(OR = 0.13; 95% CI: 0.03-0.62) to protect against the disease in healthcare workers.² Therefore, in February, the Taiwan government stated that all healthcare workers and people in crowded places or in public must wear facemasks to protect them from COVID-19 infection, even though the role of facemasks in the battle against COVID-19 is still controversial.³ Many efforts have been taken to ensure that facemasks are available and that there is sufficient supply for healthcare workers and most people in Taiwan. The production capacity of facemasks has increased from 1.3 millions per day in January to 13 millions per day in April. In addition to wearing facemasks, hand hygiene, environmental

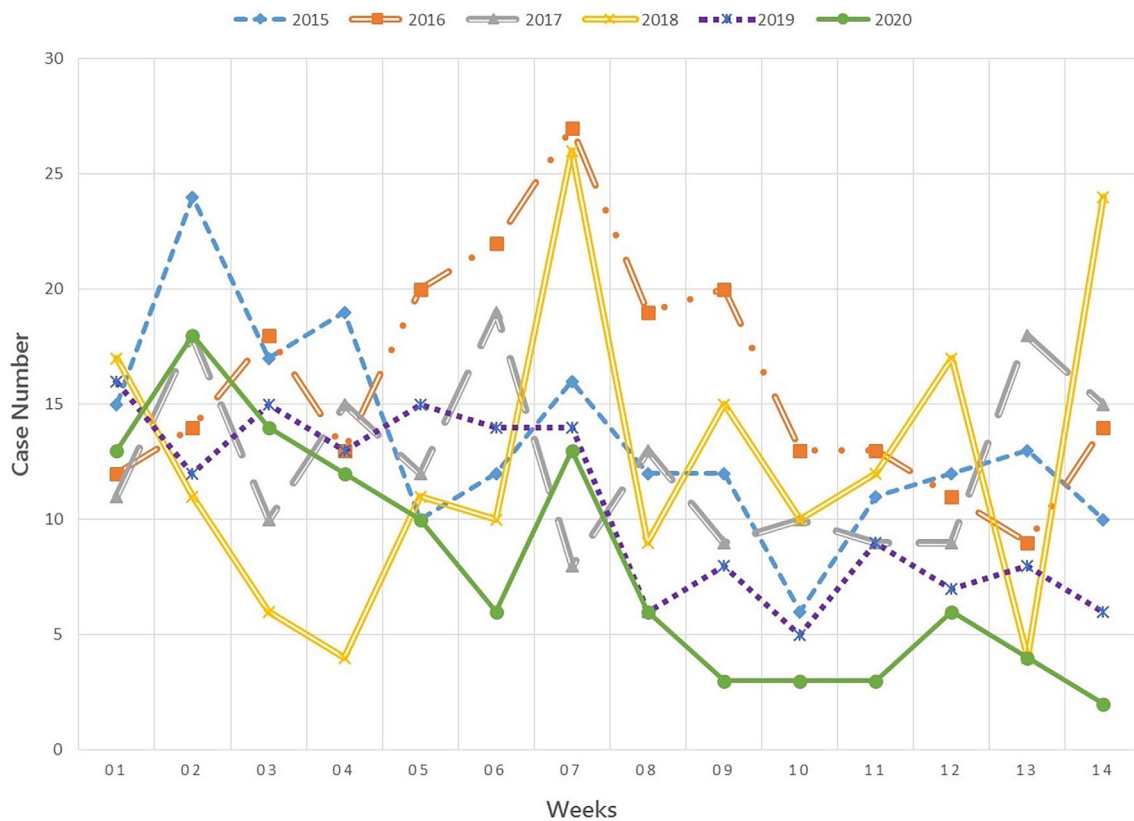



FIGURE 1 The number of cases of reported invasive pneumococcus from 2016 to 2020 according to the Taiwan CDC (<https://www.cdc.gov.tw/>)

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disinfection, and social distancing are also strongly recommended by the Taiwan government.

According to the Taiwan CDC, there has been a marked decline in invasive pneumococcus disease since February 2020 compared with cases in the past 5 years (Figure 1). *Streptococcus pneumoniae* can spread through droplets in the air as with COVID-19, and *S pneumoniae* may enter and remain in the nose and throat.⁴ The incubation period of *S pneumoniae* is about 1 to 3 days, after which it can invade the lungs, blood, sinuses, middle ear, or brain, potentially leading to a severe and fatal infection. "Invasive pneumococcal disease" is defined as an infection confirmed by the isolation of *S pneumoniae* from a normally sterile site, such as blood, cerebrospinal fluid, and pleural, joint, or peritoneal fluid.⁵ Invasive pneumococcus is a notifiable disease, and it must be reported to the Taiwan CDC within 1 week.

We believe that the reduction in invasive pneumococcus disease has been influenced by the current preventive strategies for COVID-19 in Taiwan.

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