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### Letter to the Editor

# The trend of Hong Kong confirmed cases after starting COVID-19 vaccination plan

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#### **Dear Editor**

The COVID-19 vaccination plan was officially launched on February 26 and implemented five months already. 480,000 people were completely vaccinated, and around one-third population (280,000 people) were receiving the first dosage of vaccination. Is there any effect to fight against the COVID-19 pandemic vaccination plan?

According to the Centre for Health Protection data, there are 1506 confirmed cases from 1/2/2021 to 18/7/2021 (Figure 1) including 658 males and 848 females (Figure 2). It has 1427 Hong Kong and 79 Non-Hong Kong residents (**Figure 3**). They are classified as 255 local cases (Hong Kong), 598 epidemiologically linked with local cases (Hong Kong), 636 imported cases (Other countries), and 11 epidemiologically linked with imported cases (Other countries) (Figure 4) [1].

Based on the above information, the number of confirmed cases decrease sharply within February to June, it is nearly ten times. From February to March, the major confirmed cases are local and epidemiologically linked with local cases. However, local and epidemiologically linked with local cases drop down between February to April. The imported cases become the major source of confirmed cases and only few local cases are observed. Female confirmed cases are much higher than the male.

The number of confirmed cases declines quickly because the vaccine starts functioning for an immune system. It produced the T and Blymphocytes after the first vaccination for a few weeks which builds up the entry-level of SARS-CoV-2 defense. While the second time of vaccination, its function as an immune system booster produces long-lasting memory cells to fight against SARS-CoV-2 [2]. As the imported cases are continuously rising, vaccination is the best way for preventing SARS-CoV-2 attack [3].

Up to the present, the most efficacy rate of vaccination should be 2/3 Hong Kong population to combat the SARS-CoV-2 [4] but there was around 1/3 Hong Kong population received the vaccination only. The COVID-19 pandemic still exists, threatening in the world.

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Figure 1. Confirmed cases in total.

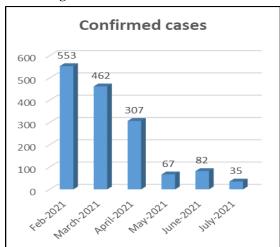
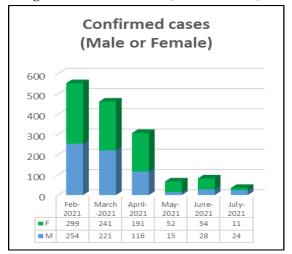


Figure 2. Confirmed cases (Male or Female).



**Figure 3.** Hong Kong or Non-Hong Kong residents.

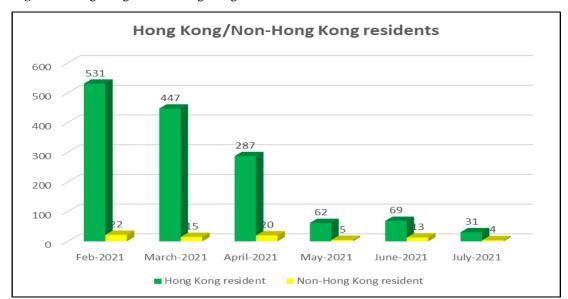
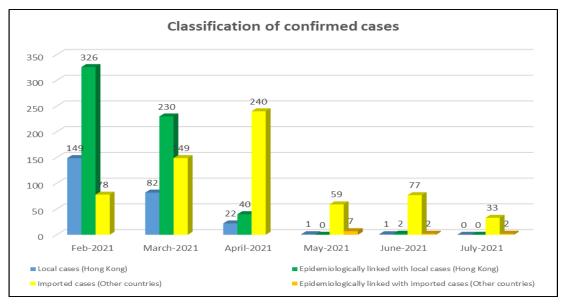


Figure 4. Classification of confirmed cases.



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All authors contributed to the concept, acquisition, and analysis of data, drafting of the article, and critical revision for important intellectual content.

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#### References

1-The Government of the Hong Kong Special Administrative Region. 20 Jul 2021.

Available at:

https://www.covidvaccine.gov.hk/en/.

Accessed 20 July 2021.

- 2-Kaur SP, Gupta V. COVID-19 Vaccine: A comprehensive status report. Virus Res 2020; 288:198114.
- 3-**Dai L, Gao GF.** Viral targets for vaccines against COVID-19. Nat Rev Immunol 2021; 21:73-82.
- 4-**Lau CS.** Can COVID-19 vaccines stop the pandemic? Hong Kong Med J 2021;27(2):84-85.

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