In my opinion,

Finding the connections between multiple variables is more difficult.

Second, we need to use existing models to find potential relationships, which are very difficult. Considering the finiteness of data sources, how to reduce errors is also a difficult problem.

Finally, how to obtain effective laws from these data and make recommendations for Hong Kong is also very difficult. We want to be convincing, it is unavoidable to use data from other countries for verification.

I can boil it down to a whole set of processes.

We may need a lot of skills to optimize the linear regression model, such as the substitution method. For example, replace x with the x square of e.. So we need to try this process many times.

These all rely on a lot of knowledge we have learned before, and it will also allow us to combine learning and using, and also improve our math and data analysis knowledge framework.

I could say a branch direction.

After mining through a variety of data, such as Number of infections , Number of people cured speed......the purpose is to find the most important factor to curb the spread of the covid 19. And give advice on vaccination in Hong Kong. Such as vaccination time, vaccination range suggestion, etc. This can also explain some current phenomena and raise people’s expectations.

Select different time dimensions. Combining the actual situation, such as excluding gatherings of people on holidays, considering government decisions,

Our expectation is that the vaccination rate is the main , because this factor is exactly what we want to explore.

At the same time, we ensure that the knowledge we learned in this lesson such as linear regression can be fully used,

Data source visualization (for studying Israel, data sources in other countries may be needed for comparison)

Data and formula prediction of the number of infections, deaths and cured numbers under different vaccination rates

Data and formula prediction of infection rate, death rate and cure rate under different vaccination rates

Data and formula prediction of infection rate, mortality rate and cure rate under different vaccination rates

Transmission rate and transmission data and formula prediction under different inoculation rates

Visualization of results and formulas

Derive a predictive model

Error Analysis

Analyze the key factors of the increase in the number of infections

Proving that vaccines are the most effective means to reduce the number of infections and increase the cure rate "needs to compare other countries"

Predict several possibilities for Hong Kong under different vaccination rates in the future

Give reasonable suggestions on vaccination in Hong Kong

Transmission data when there is no vaccine in the initial stage

There are now transmission data for vaccines