

Spatial Patterns of Change in Suicide rate after COVID-19 in Japan

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Webpage link : <https://r09228001.shinyapps.io/finalreport/>

Research Questions :

1. What is the spatial pattern of changes in suicide rate after COVID-19 in Japan ?
2. Do places with more serious COVID-19 have more increasing suicide rate ?

Panel Guide:

I created several panels in my pages. Firstly, Introduction panels is for introduce 47 prefecture locations in Japan. Secondly, I showed time series of suicide count, suicide rate, change in suicide rate, adjusted change in suicide rate. Thirdly, choropleth were made to investigate the spatial pattern of suicide index. Fourthly, data table with both suicide and COVID-19 are available on my page. Fifthly, time series and choropleth of COVID-19 infected and death were plotted. Sixthly, the bivariate maps of suicide and covid-19 were made. The panel examples are showed as the following.

Fig.1 Interactive Panel

Fig.2 Data Table

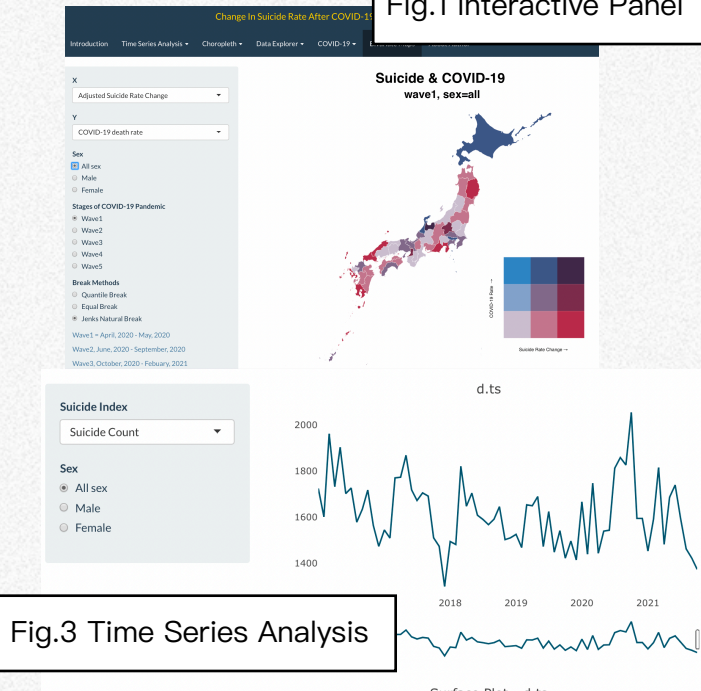


Fig.3 Time Series Analysis

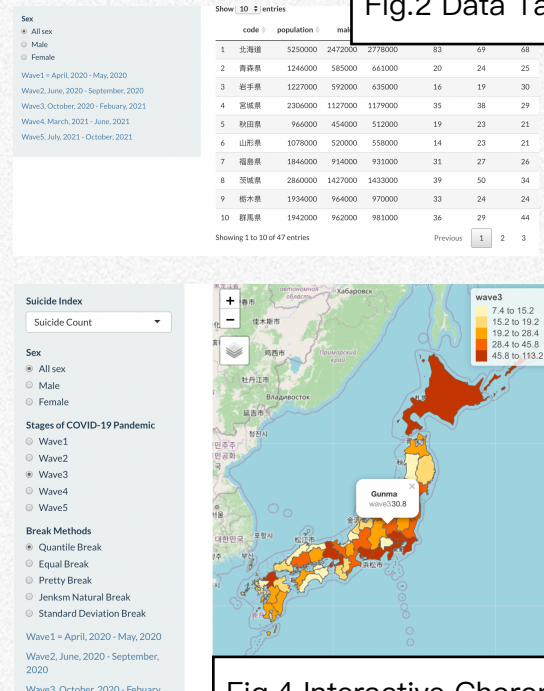


Fig.4 Interactive Choropleth

Discussion :

To answer my 1st question, with panel three, we can easily investigate the spatial pattern of change. In all sex, suicide rate drop in the 1st wave in most places but increase in the 2nd wave especially in the southern rural area. In the 3rd waves suicide rate remains increased in most places especially in western Japan. The 4th wave experienced mild change but in the 5th wave, suicide rate drop in most of places.

To answer my 2nd question, with panel six, we can easily spot the relation between change in suicide rate and COVID-19 infected or death rate. If we change break methods to "Equal Break", we can see throughout 5 waves of COVID-19, in 2nd, the High-High areas are very little, which indicated that Suicide rate didn't necessary change with COVID-19 infected or death condition. The High-High phenomenon can be found in Kyusyu, Shikoku and Honshyu, especially in rural prefectures.