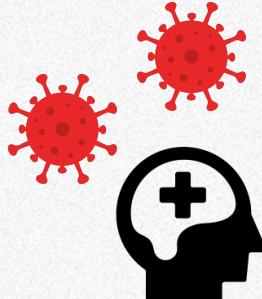




Spatial Patterns of Change in Suicide rate after COVID-19 in Japan

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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

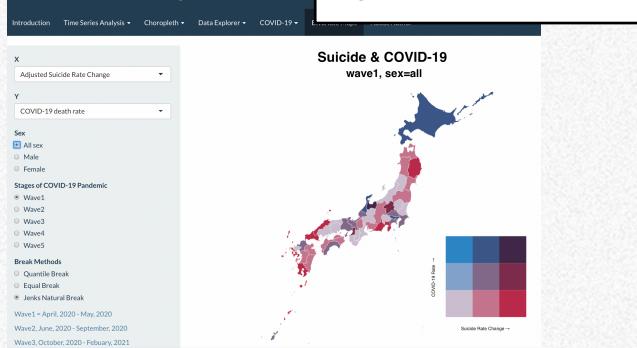


Fig.3 Time Series Analysis

Fig.2 Data Table

Sex	code	population	mail				
>All sex	1	5250000	2472000	2778000	83	69	68
Male	2	2460000	585000	6610000	20	24	25
Female	3	2778000	592000	4350000	16	19	30
Wave1, April, 2020 - May, 2020	4	2304000	1127000	1179000	35	38	29
Wave2, June, 2020 - September, 2020	5	966000	454000	5120000	19	23	21
Wave3, October, 2020 - February, 2021	6	1078000	520000	558000	14	23	21
Wave4, March, 2021 - June, 2021	7	1846000	914000	931000	31	27	26
Wave5, July, 2021 - October, 2021	8	2860000	1427000	1433000	39	50	34
	9	1934000	964000	970000	33	24	24
	10	1942000	962000	981000	36	29	44

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.