Suicide Rates from all around the World, 1985-2016

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Data description: Data was taken from the website at *https://www.kaggle.com/datasets*. The original data file consists of **12 columns** which includes countries (one hundred and one countries out of all countries in the world), country population, gross domestic product for year and per capita. In addition, suicides rates are categorized in the data by sex, age, and generation for each year. The data has **27,820 rows** in total.

Story: In every stage of life, in every country, many people are committed suicide. This unfortunate yet important issue might be solved if we understand the underlying reasons better. Decision taken to commit suicide might have a broad range of reasons including individual to societal levels. In this report, I aimed to demonstrate possible macro-level reasons that increase the risk of suicide.

Audience: If we want to come up with effective solutions to prevent people from committing suicide, it is important to understand macro-level risk factors such as economic or political as much as individual risk factors. Therefore, I believe health care professionals would benefit from this report a lot to broaden their understanding about suicide.

Questions: After I plotted single-dimensional figures to understand the patterns in suicide rates, I have asked these questions below:

1. Does suicide rate change based on Gross Domestic Products per Capita? If it does, do we observe this relationship in every age category? (Page 4)

2. How does the pattern in the suicide rates change across years for each country? Are there any underlying reasons for the dramatic changes in suicide numbers in certain countries? (Page 5)

Section 2

Layout Example 1:

TITLE	
	Name.Section.Course
STORY	Question 1
Single-dimensional plots providing background about the data.	Question 2

Section 3

This page consists of single-dimensional plots drawn to understand the data and are used as a step to explore more in-depth questions.

Suicide Rate in the World from 1985 to 2016
Number of suicides committed by male and female
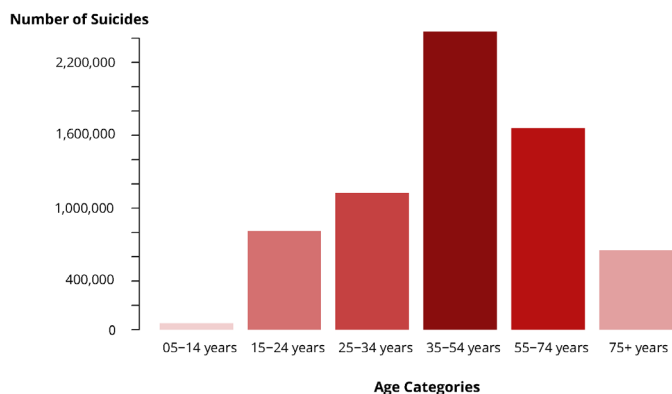in the world from 1985 to 2016.
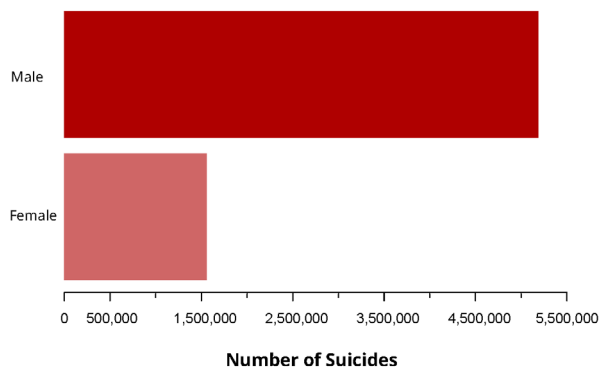
Men are more at risk of committing suicide than women overall.

Number of Suicides by Age, 1985–2016
The figure illustrates the number of suicides
in the world according to age categories from 1985 to 2016.

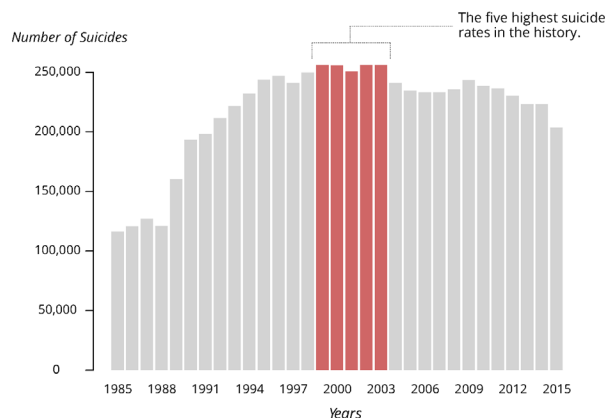*People at the age between 35 and 54 are more likely to commit to suicide than any other age group.*

Number of Suicides in the World, 1985–2015
Number of suicides committed around the world
from 1985 to 2015.
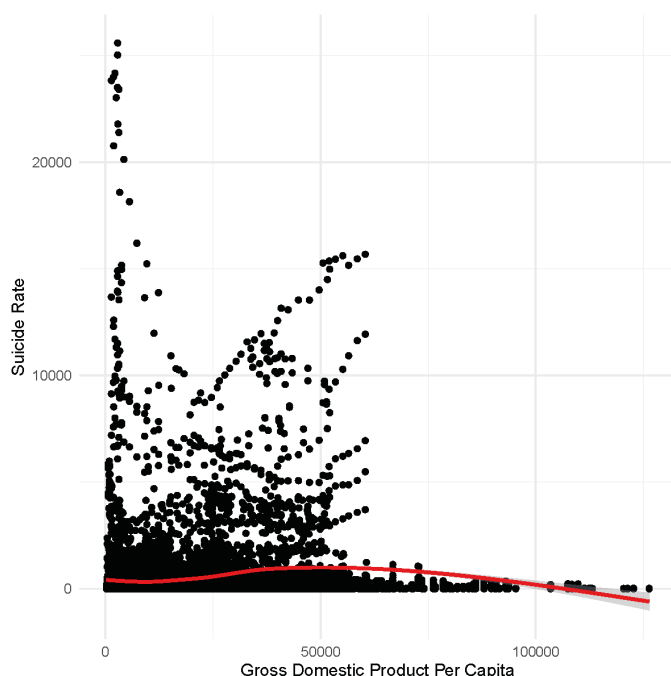

After 2000s, the number of suicide rates around the world has slightly decreased.

Section 3

This page includes the visualizations to answer the first question.

1. Does suicide rate change based on Gross Domestic Products per Capita? If it does, do we observe this relationship in every age category?

The figure on the left shows that as gross domestic product per capita increases, suicide rate decreases. However, this relationship is not very strong.
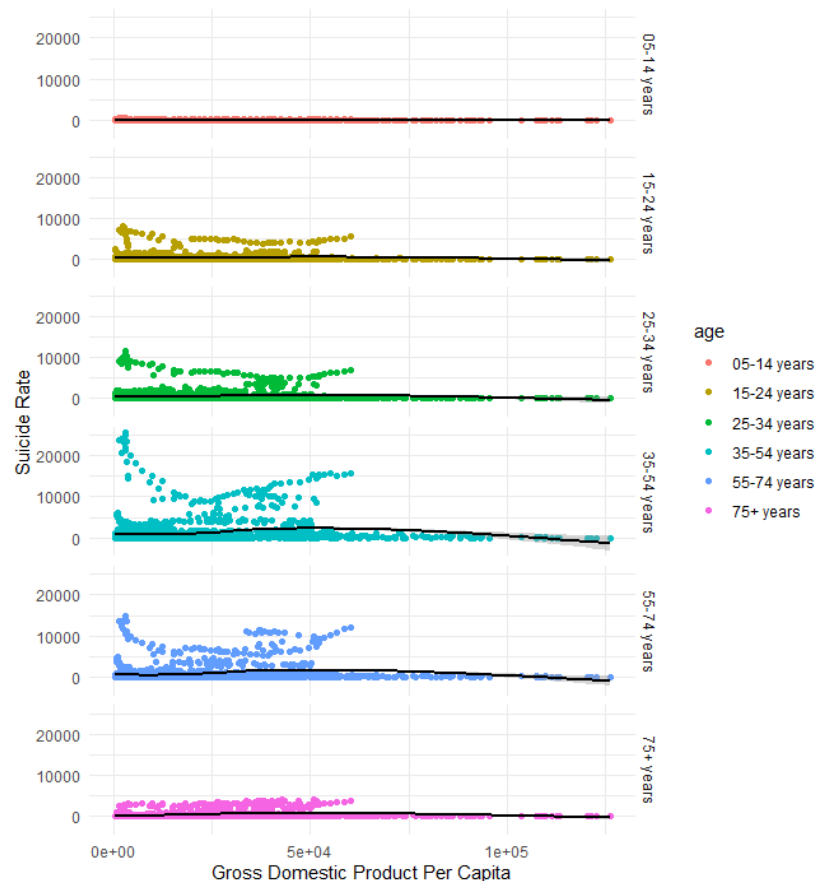
After I observed the slight changes in suicide rate based on GDP per capita, I explored if this relationship holds for each category.

Not surprisingly, the changes in GDP per capita are not related with suicide rates in very young ages and in very old ages. However, the figure illustrates a decrease in the suicides rate among ages especially between 25 to 75 as GDP per capita increases.

Section 3

The current page demonstrates the visualization for the second question.

2. How does the pattern in the suicide rates change across years for each country? Are there any underlying reasons for the dramatic changes in suicide numbers in certain countries?

Number of Suicides over Years by Country

The figure illustrates number of suicides committed in different countries as well as how suicides rates in these countries have changed throughout years.

Source:https://www.kaggle.com/datasets
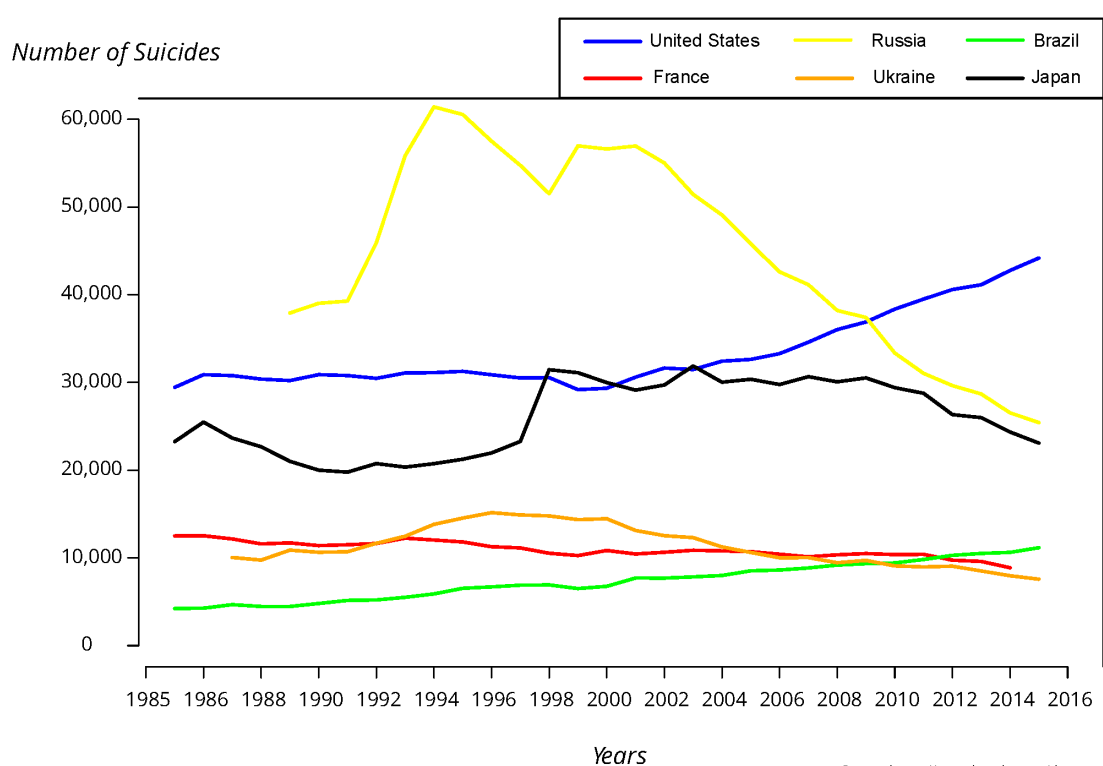
The figure above shows how suicide numbers have changed throughout years for particular countries including Russia, USA, Brazil, France, Ukraine, and Japan.

Interestingly, as the figure shows, there is a dramatic increase in suicide rates in Russia after 1990s when the Union of Soviet Socialist Republics collapsed. The similar pattern exists for Ukraine as well. When looking at Japan, one could see an increase in the numbers around 2000s when Japan had big economic crisis.

Therefore, I believe this figure would be very helpful to understand how political or economic changes affect the suicide numbers.