



KNOWLEDGE MAPPING AND DATA VISUALIZATION

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IMPACT OF GOVERNMENT-IMPOSED CLOSURE ON
NUMBER OF COVID-19 CASES

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Impact Of Government-imposed Closure Measures On Number Of Covid- 19 Cases

In this project, I will examine the effect of full, partial and special case closures applied in Turkey during the Covid-19 pandemic on the number of cases. I will convey the understanding of closure of Turkey and define these types of closure. I will also consider before and after these closure processes and explain to you the effect of closures on the number of cases, which is the main purpose of my article.

Later in my article, I will examine the course of the increase in cases during these complete and partial closures.

Abstract

In this project, I will examine the effect of closure measures implemented in Turkey during the covid-19 process on the number of cases. I will explain clearly what closure means for Turkey and I will compare the number of cases before and after these closure measures.

For data collection, I first started by examining mean of closure for Turkey and examine the news of BBC Turkey, step by step, Turkey's fight against coronavirus, because the news site handled the process chronologically and followed the process meticulously from the beginning, then I explained when the closure practices started and how the process developed. In order to reveal that the increase or decrease in the number of cases was affected by these situations, I interpreted daily data, case maps published by the Ministry of Health. Likewise World Health Organization share too data of Turkey every day.

The data that I will collect for the reliability and confirmation of the information; It will be taken from the Ministry of Internal Affairs of the Republic of Turkey (closure circulars), the BBC Turkey ,Ministry of Health and World Health Organization. And these data will be supported by data visualization tools and presented in graphical form.

Our Ministry Of Health shares the number of cases on the web page they create daily. Likewise World Health Organization share the datas about Turkey's situation too. The data I have obtained for my project is the number of tests per day and the number of cases per day (Since the number of patients is given instead of the number of cases in some date ranges, I will take the number of cases as the number of patients at that time.) I will present this data in graphical form for easier reading and summarize the graphs for you. I'll make my charts on Excel.

Due to the length of the closing process, I have determined the time period I will examine as 3 periods. First; May 2020, when the first full closure decision was made: On this date, there was a Ramadan holiday, and for the first time, 5 days of uninterrupted curfews were imposed not only in 30 metropolitan cities (+ Zonguldak) but all over the country and I'll get the first 14 days of data for June because the incubation period of the virus is 14 days. Thus, we can see the pre-closure and post-closure process of the number of cases by comparison.. Secondly, I will examine December 2020, when there is a curfew between 21.00 and 05.00 on weekdays, which I assume is the first point of partial closures. Finally, I will discuss the 1 week of data before 17 days complete closure that we experienced recently (between 29 April 2021- 17 May 2021).

Introduction

Covid-19, which came out of Wuhan, China at the end of 2019 and was seen in most countries around the world in as little as 3 months, traveling faster than a normal virus, was first seen in our country on March 11, 2020. Before that day, only treatment with medication alone was not enough, and the virus progressed irresistibly. Drug measures taken are not sufficient in this disease, the treatment of which is not accurate. States have been forced to lower the number of cases and implement stricter measures to reduce transmission. Turkey was also one of the countries that took medicines and other measures. In general, we can explain the measures in Turkey under 2 headings.

1-Inter-country travel: Like all countries, Turkey has closed land air and sea roads, these roads have not been opened until a certain period of time. The rule was later changed to be travelable in necessary circumstances. In this way, Turkey has aimed to stop the increase in case which is associated with foreign transmisson.

2-Going to close within the country: In addition to the foreign measures taken, measures were taken domestically and even closed .

Closure in Turkey can be analyzed under three headings.

2a- Partial Closure: It has been implemented in various ways almost from the beginning of the process. The first partial measure is the travel restriction covering 30 Metropolitan and Zonguldak (due to the excess of lung diseases).

In partial closure; All activities were not stopped and they continued their normal lives for certain hours and days and they could not go out except for certain hours. During the partial

closure, hairdressers and beauty salons, barbers, places of worship, restaurants and similar eating and drinking venues were able to continue with a certain capacity or did not serve. In the closure of the part applied at the weekend, the market, grocery store, bakery and hospital were kept open in such places and only the basic life needs were kept open, the number of cases decreased due to the decrease in the number of cases in places where the contamination increased and the number of cases decreased compared to normal life and the measures taken gave results, but These measures will not be sufficient in the later stages of the process.

2b- Complete closure: This measure, which is applied for times such as Eid and the month of Ramadan, is tighter and lasted longer than partial closure, when the activity will reach its peak. This measure, which had to be implemented twice since the beginning of the process, was first applied on the dates of Ramadan Feast in 2020, and for the first time, even the bakeries were not kept open, and the bread was distributed with the bakers walking between the neighborhoods. The second full closure started from the second week of May 2021 (the month of Ramadan), and lasted 17 days, including the Ramadan Feast. During this period, significant decreases and improvements were observed in the number of cases.

2c- Exceptions: Apart from these, there are also special cases. In these special cases, on the days that are normally public holidays, a curfew is sometimes combined with a weekend ban. As long as these situations go into either partial or full closure, the course is determined according to the calendar.

With such domestic measures, it was aimed to stop the increase in cases and to minimize the risk of transmission.

It is an undeniable fact that the type of full closure applied by the state throughout the process reduces the number of cases, but it is an enigma that the same effect can be mentioned for partial and special case closures, because the situation we call partial closure is prolonged in a careless and uncontrolled manner from the beginning of the process. The law enforcement officers, which also impose criminal procedures on people, unfortunately pushed the process to live boredly, but it still had a good effect on the number of cases apart from normal life (not as much as the effect of full closure).

With the vaccines developed, the end of the closures and return to normal life as soon as possible may be the only wish of everyone right now.

Methodology

While investigating the effect of closure practices on the number of cases, the first thing to do would be to specify the date ranges of the closures. At this point, research was done on the internet and a chronological order was searched, and finally, chronological sources were obtained from BBC Turkish and Amerikaninsesi. Then, what the closures mean for our country, what types of closures are examined, the circulars of the Ministry of Interior were examined for this closure information, and it was learned what kind of measures were taken in which type of closure. After the closures were clearly stated, the data of the Ministry of Health and the World Health Organization were examined for the number of cases in the determined date ranges, and the data in the excel files were designed in tabular form. Appropriate graphs were prepared from the designed tables with the help of excel. In the required charts, normal days and closing days are represented by different colors so that increases or decreases in cases can be seen. Charts can be viewed in a file called "charts" on Github.

Scenario

The closure practices affected everyone from 7 to 70. People began to perceive it as a luxury to get out of their homes and buy bread. At this point, the people who came up with the idea for my project were my older sisters living in the metropolitan city and then my family with the increase in closures. During the closing days, we would sit at home and wait for the days to pass and count the hours because we started to perceive even a small walk as something too big. As a family and as a country, we wished that the closures would reduce the number of cases and that there would be no closure once again, but we have always been in a closure since almost the beginning of the process, even while I am writing these sentences, we are still within the weekday restriction hours. It is almost impossible for the people who are not affected by the closure practices, and while I was doing this project, I took my family first, then my environment, and then my country as a basis.

Reference

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