

# Crisis within a Crisis: Assessing the Surge in Mental Health Issues, Suicidal Risks, and the Role of COVID-19 in Türkiye

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**Abstract—** This report provides a focused analysis of mental health issues in Turkey, emphasizing depression, anxiety, and the amplified challenges posed by the COVID-19 pandemic. Global and national data from 2009 to 2019 illuminate the prevalence and trends of depressive disorders. The report examines the impact of anxiety disorders, heightened during the pandemic, and stresses the interconnectedness of mental health with fear of COVID-19. A critical concern is the surge in suicidal tendencies, notably among students, accentuated by socio-economic factors. The report concludes by urging targeted interventions to address these escalating mental health issues, calling for a comprehensive approach in Turkey's public health strategy.

**Keywords—** mental health, depression, anxiety, suicidal tendencies, COVID-19 pandemic

## I. INTRODUCTION

One of the common issues that human beings experience is mental health. Some studies explore the relationship between mental health issues, stress, and the harmful effects of these conditions, especially in light of the COVID-19 epidemic. These problems affect not only millions of people globally but also people in Turkey. The epidemic has shown these difficulties with its own set of difficulties, making a lasting impact on mental health around the world. All of these may cause suicidal thoughts for some people in Türkiye. The main point of this paper is to indicate these problems with the help of studied data and statistics..

## II. HYPOTHESES

H1: The prevalence of chronic depression in Turkey has experienced a significant change over the years, possibly influenced by socio-economic factors and global events.

H2: The COVID-19 pandemic has led to a substantial rise in anxiety disorders among the Turkish population, particularly due to factors such as social isolation, economic challenges, and fear of the virus.

H3: The socio-economic challenges brought about by the COVID-19 pandemic have contributed to a notable increase in suicidal tendencies among Turkish students.

H4: There has been a significant change in suicide rates in Turkey, particularly after the onset of the COVID-19 pandemic, reflecting the socio-economic hardships faced by the population.

H5: The alarming rise in suicide cases in Turkey, notably due to financial difficulties, is influenced by the increasing cost of living and economic challenges, with a significant impact observed from the year 2020 onwards.

## III. METHODOLOGY

This study focuses on dissecting the intricate landscape of mental health in Turkey, with a specific emphasis on the dynamic interplay of depression, anxiety, and suicidal tendencies in the wake of the COVID-19 pandemic. Employing a combination of qualitative and quantitative approaches, this research draws insights from diverse sources to present a comprehensive analysis.

### Data Collection:

**Qualitative Data:** The study delves into differentiating factors such as gender and geographical locations, leveraging qualitative data to provide a nuanced understanding of mental health challenges in Türkiye.

**Quantitative Data:** Utilizing quantitative data, the research incorporates variables such as the prevalence of mental disorders, suicide rates, and demographic specifics. Key quantitative sources include who.int, euronews.com, hopechest.org, tuik.gov.tr and eurostat.com.

### Sampling and Datasets:

Euronews.com provides datasets based on both qualitative and quantitative data, using a random sampling method. The annual updates and the unit of measurement, expressed as the percentage of individuals in each European country, contribute to the robustness of the data.

Datasets obtained from who.int, tuik.gov.tr, ourworldindata.org and eurostat.com have distinct sampling methods and units of measurement, contributing diverse perspectives to the analysis.

### Data Processing:

Prior to analysis, datasets are meticulously cleaned to address missing data and outliers. The cleaning process ensures the reliability and accuracy of the subsequent analyses.

RStudio is employed to implement R codes, facilitating data visualization through the creation of insightful graphs that enhance the clarity and interpretability of the findings.

#### IV. MENTAL DISORDERS

##### A) Depression

	n	min	mean	median	sd	max	Q1	Q3	skewness	kurtosis
Numbers	11	3.9321	4.0385	4.0664	0.0706	4.1275	3.9736	4.0865	-0.5155	1.7192

Table 1. Number of Depressive Disorders Between years 2009-2019 in Türkiye

Depression affects over 300 million people worldwide, regardless of culture, age, gender, religion, race or economic status.

More than 75% of people in low- and middle-income countries receive no treatment for depression.

Although high-income countries offer “minimally adequate” treatment for depression in 23 per cent of cases, this drops to just three per cent in low and lower middle-income countries.[1]

- Globally, an estimated 5% of adults suffer from depression.
- More women are affected by depression than men.
- Depression can lead to suicide.
- There is effective treatment for mild, moderate and severe depression.[2]

The symptoms must also significantly affect their personal life, family, social, education, work, or other areas of their life – or only have a limited effect because of significant effort.[1]

##### Key facts

- Depression is a common mental disorder.

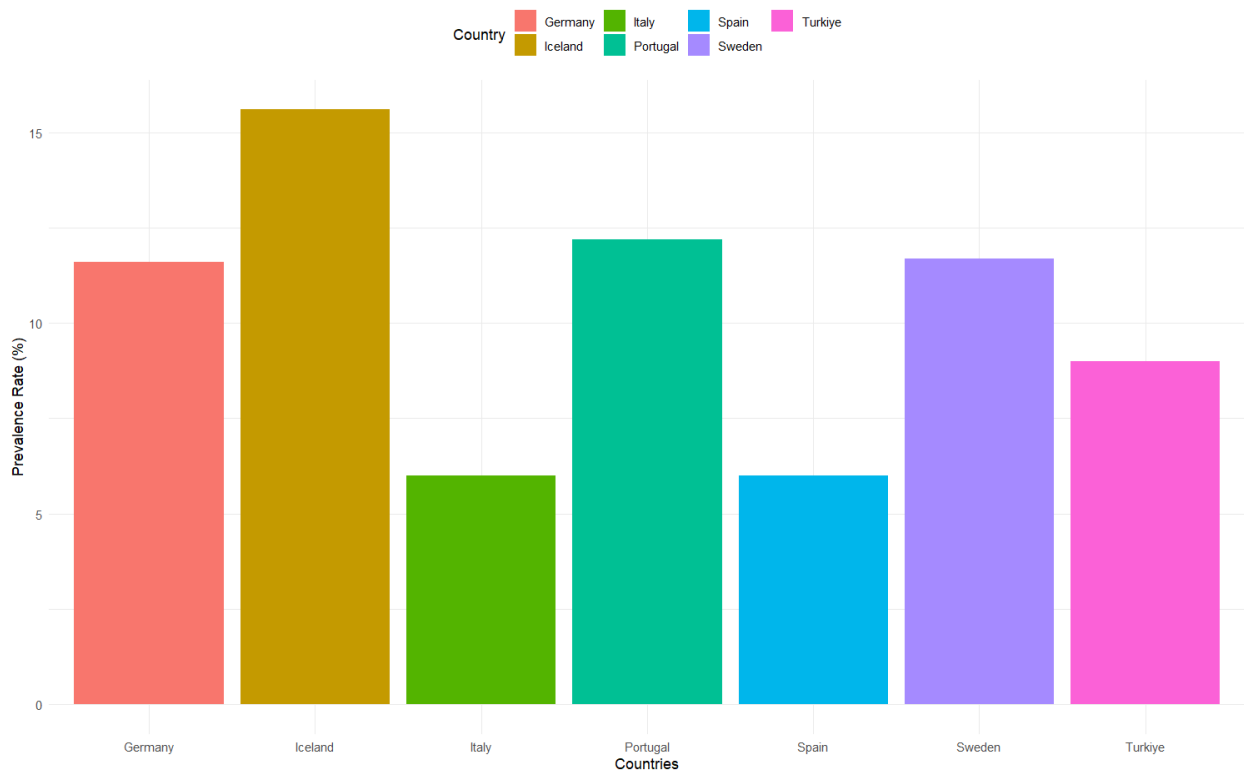


Figure 1. Prevalence Rate of Chronic Depression in Europe in 2019

According to a research conducted by Eurostat, a statistical institution affiliated with the European Commission, the prevalence rate of chronic depression in Europe was 7.2% in 2019.

As one moves south, the depression rate tends to fall below the EU average. In Italy and Spain, the prevalence rate of chronic depression is around 6%. In contrast, in Türkiye, the prevalence rate of chronic depression is 9%.

Among the countries included in the research, Iceland had the highest prevalence of chronic depression at 15.6%.

On the other hand, among the European Union countries, Portugal had the highest rate at 12.2%. Sweden (11.7%) and Germany (11.6%) also had rates of chronic depression above the EU average.

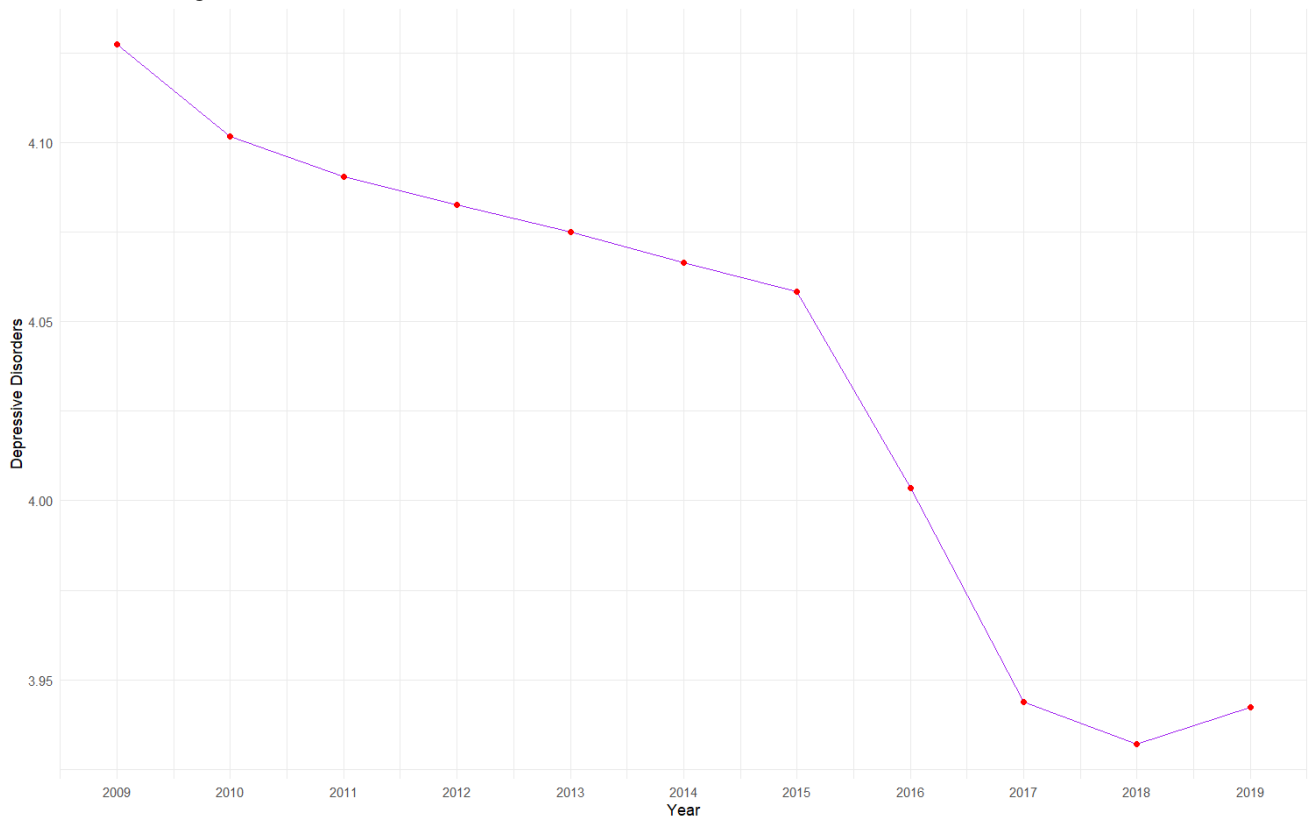


Figure 2. Depressive Disorder Prevalence Between the Years 2009-2019 in Türkiye

The line chart depicts changes over a period of time, showing depressive disorders prevalence in Türkiye.

2009 .It can be said that from 2009 to 2015 there is a gradual decrease. Then, from 2015 to 2017 there is a sudden decreased and it reaches the lowest point in 2018.

According to this chart, It can be see that the highest point is

B) Anxiety

	n	min	mean	median	sd	max	Q1	Q3	skewness	kurtosis
<b>Numbers</b>	11	4.3111	4.4755	4.4827	0.0294	4.5136	4.4505	4.4961	-0.4117	1.7207

Table2. Anxiety Disorder Prevalence Between years 2009-2019 in Türkiye

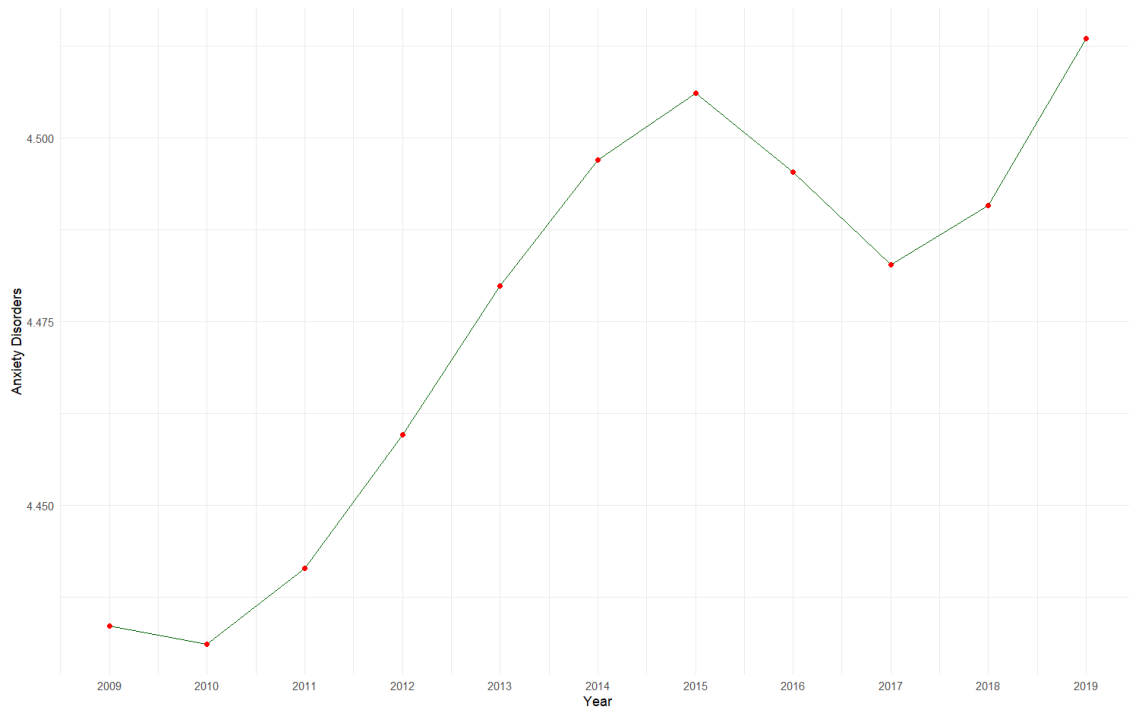
284 million people suffer from an anxiety disorder worldwide. Anxiety disorders disproportionately affect women, and 2.8% of males suffer from an anxiety disorder, where 4.7% of females suffer from anxiety disorders.

In a 2020 survey, 62% of respondents reported experiencing some degree of anxiety.

In the first year of the COVID-19 pandemic, global prevalence of anxiety increased by a massive 25%.

To be diagnosed with generalized anxiety disorder, patients must have either:

- Excessive worry about several aspects of everyday life, including work, finances, health, or family.
- General anxiety that is not about particular events.[1]



*Figure 3. Anxiety Disorder Prevalence Between the Years 2009-2019 in Türkiye*

The line chart depicts changes over a period of time, showing anxiety disorders prevalence in Türkiye.

According to this chart, It can be see that the highest point is 2019 and the lowest point is 2010.

It can be said that from 2010 to 2015 there is a gradual decrease. Then, from 2015 to 2017 there is a sudden decreased and then it started to increase again.

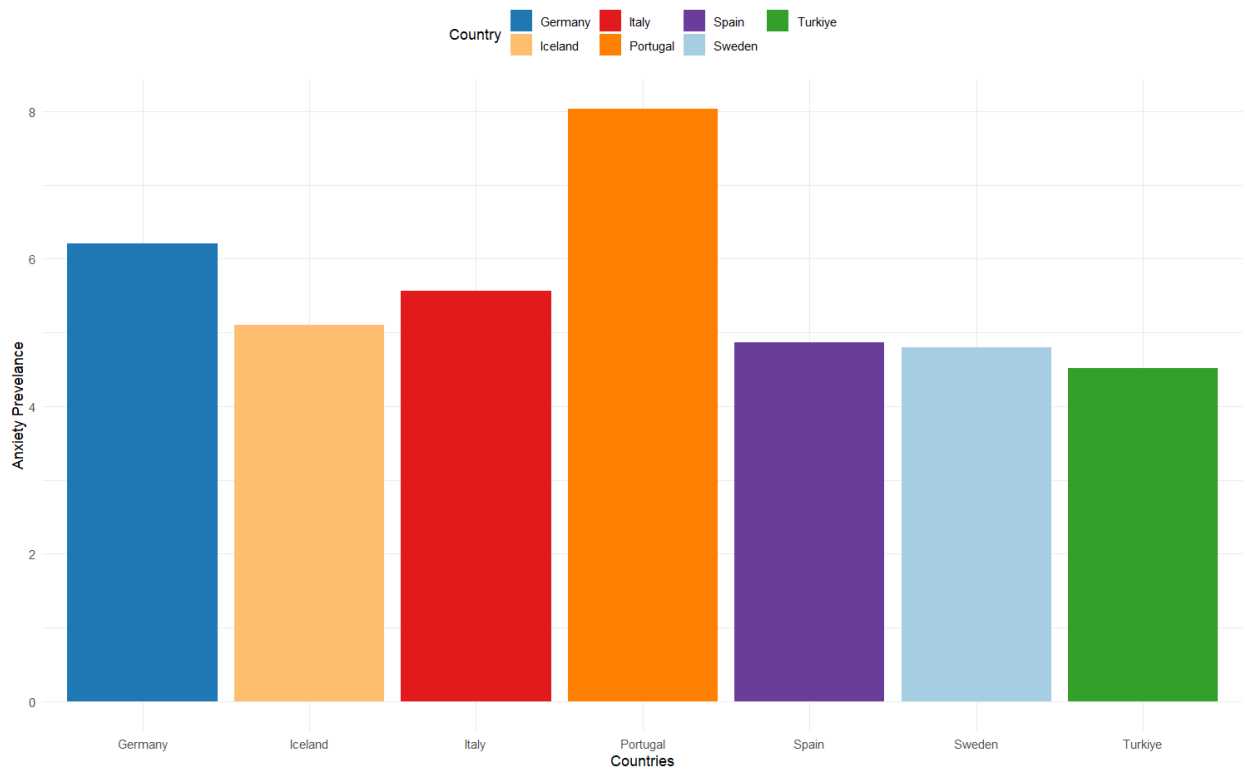


Figure 4. Anxiety Disorders Prevalence in Europe in 2019

The bar chart illustrates anxiety prevalence data for the year 2019 across seven countries: Germany, Iceland, Italy, Portugal, Spain, Sweden, and Türkiye.

Each bar on the chart corresponds to a specific country, with the height of the bar representing the anxiety prevalence in that country. Notably, Germany exhibits the highest anxiety prevalence, followed by Italy and Portugal. Iceland and Sweden have relatively lower anxiety prevalence, and Spain falls in between. Notably, Türkiye stands out with the lowest anxiety prevalence among the listed countries.

The comparison of *figure 1* and *figure 4* shows that while Iceland is the highest in the depression disorder, Portugal is the highest in the anxiety disorder and Türkiye is the lowest in the anxiety disorder, but it is the fifth highest in the depression disorder in 2019 across seven countries.

#### V. HOW COVID-19 AFFECTED MENTAL HEALTH IN TURKEY

One of the vital causes of anxiety is the COVID-19 pandemic, which occurred in 2019. After the announcement of the first case in Türkiye, which occurred on 11 March 2020, some precautions were taken by authorities [11].

One of the extraordinary precautions compared to people's routine lifestyle was lockdowns and curfews. It results in profound, dramatic changes in millions of lives. Experiencing this unexpected new lifestyle caused negative effects on people. In *Figure 1*, it can be seen that there are different time periods when COVID-19 cases increased. This situation affected not only the physical health but also

the mental health of the individuals, especially during increased cases.

#### VI. SUICIDAL TENDENCIES OF MENTAL DISORDERS

Approximately 95% of all patients who attempt or commit suicide have a diagnosis of mental disorder. About 80 percent of this rate is depression, 10 percent is schizophrenia, and 5 percent is dementia or delirium.[14]

*Figure 1* shows the factors that lead to depression and play a role in suicide risk as follows.

- 1) Being divorced, widowed, or single increases the risk of suicide. The risk is highest in young and middle-aged widows. The risk is lowest in married couples who have children. Living alone is one of the highest suicide risks worldwide.
- 2) Unemployment and economic problems increase the risk of suicide. As education level decreases, suicide rates increase.
- 3) Sudden changes in social status increase the risk of suicide. Suicide rates are higher in people living in cities than in rural areas.
- 4) Family characteristics play an important role in suicides. Having a family history of suicide, coming from a broken family, domestic violence, sexual or physical abuse within the family, a family history of psychiatric illness,

loose family ties, and poor economic status of the family increase the risk of suicide.[15]

### Suicide Rates according to Factors

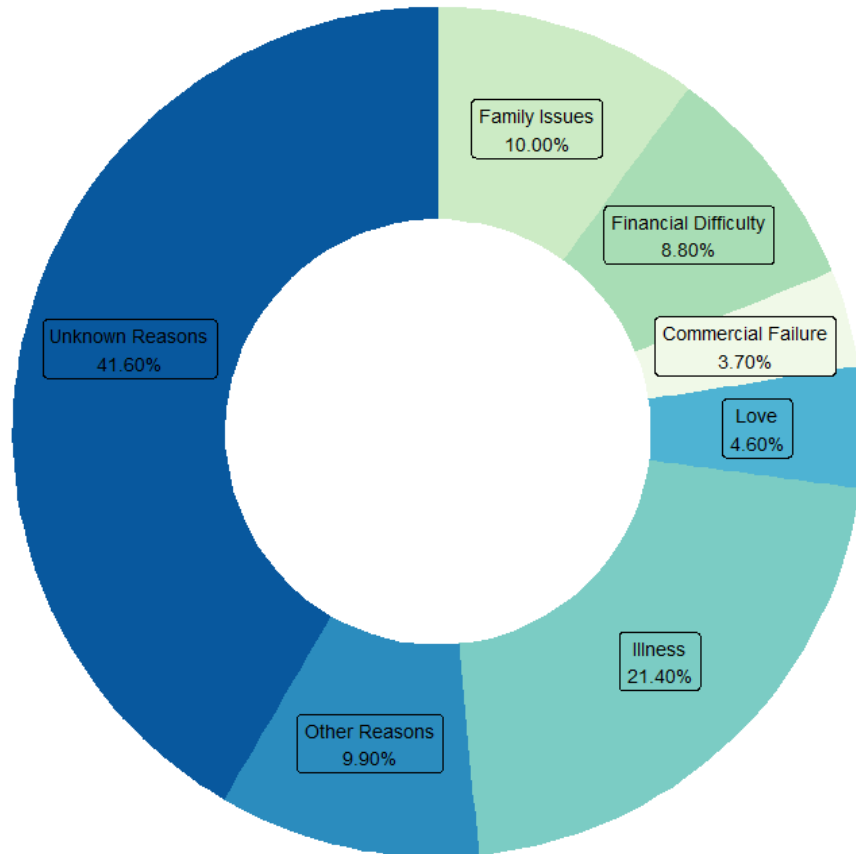


Figure 1. Suicide Rates according to Factors in Türkiye (2002-2019)

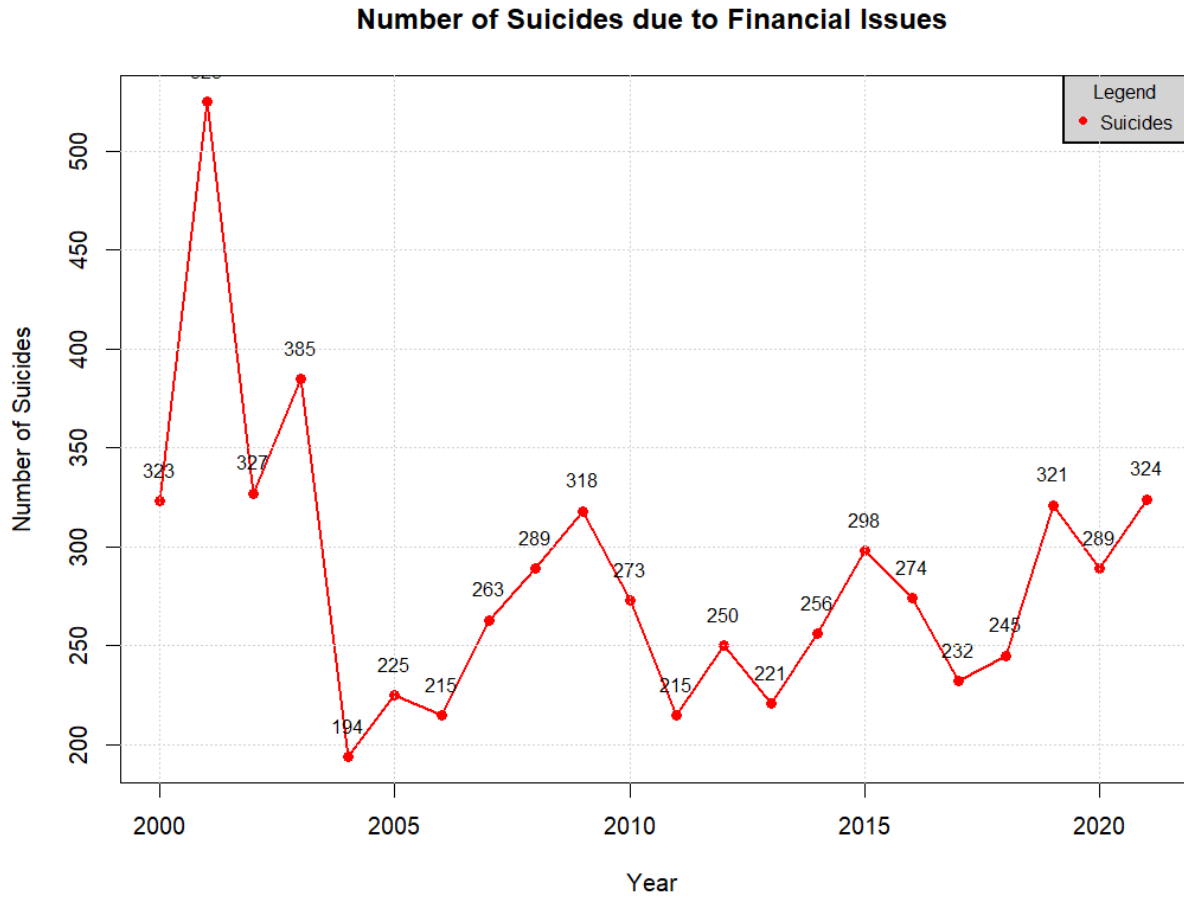
#### A) Alarming Rise in Suicide Cases

Although suicide rates vary widely from country to country, there is an increase in all countries around the world. In Türkiye, where more than 3 thousand citizens have committed suicide every year since 2012, this number has exceeded 4 thousand as of 2021 for the first time.

The increasing anxiety and despair of young people about the course of the country is also reflected in various reports and survey results.

Death and causes of death statistics announced by the Turkish Statistical Institute (TUIK) for 2020 and 2021 revealed a huge increase in the number of citizens who committed suicide due to the increasing cost of living.

Figure 2 shows the number of people who committed suicide due to financial difficulties increased from 289 in 2020 to 324 in 2021.



*Figure 2. Number of Suicides due to Financial Issues in Türkiye*

Figure 3 indicates, although there is an alarming rise in suicide cases, the lowest suicide rate in Europe is in Türkiye. Also, according to the World Health Organization, Türkiye's suicide rates rank 175th among 183 countries.[17]

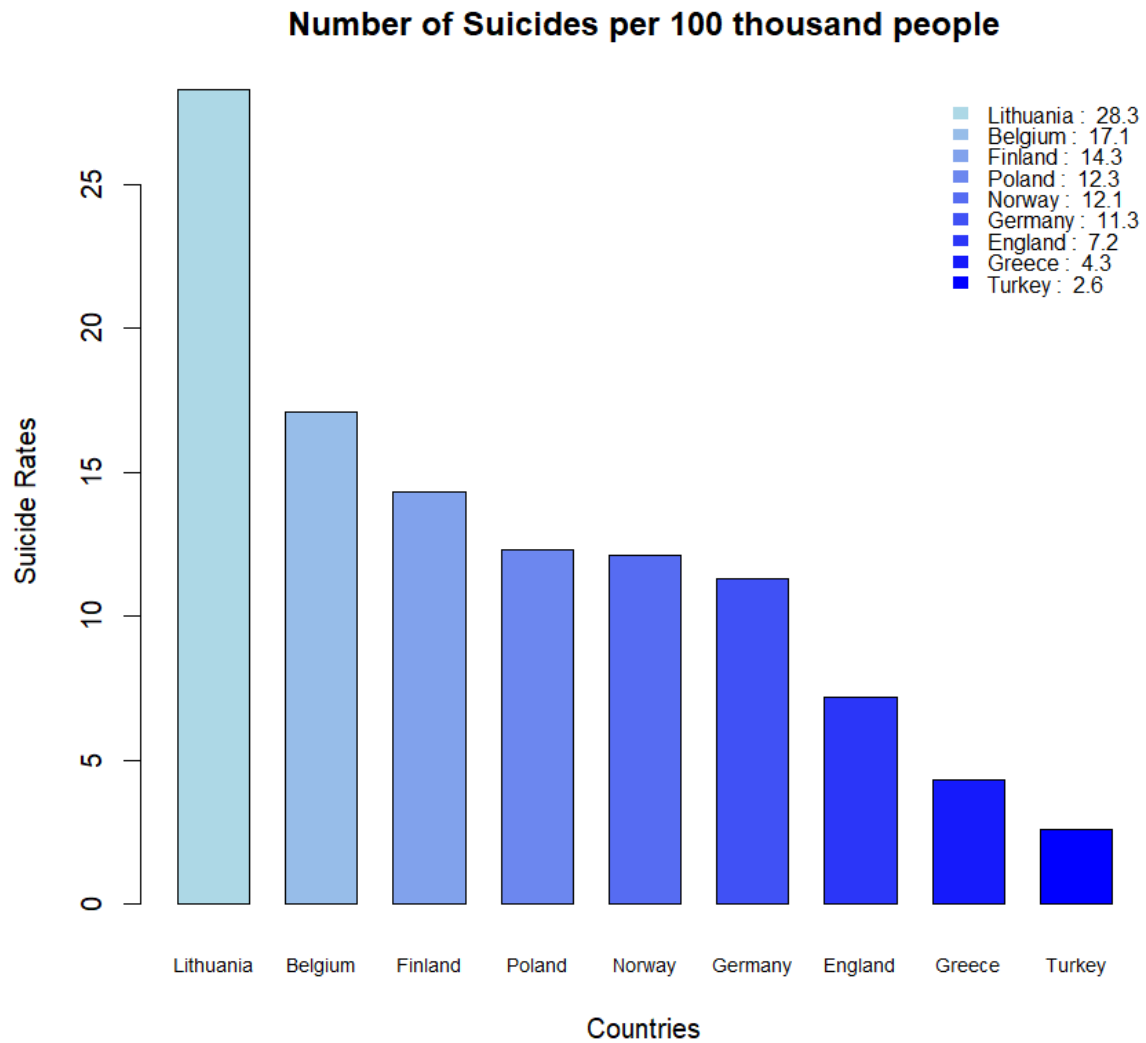


Table 1 shows, suicide cases fluctuated between 3,100 and 3,200 in the subsequent years. The highest number was recorded in 2012 at 3,287. According to TUIK (Turkish Statistical Institute) data, in 2013, 3,252 people committed suicide. In 2014, the number was 3,169, in 2015 it was 3,246, in 2016 it was 3,193, in 2017 it was 3,168, and in 2018, it was 3,161.

This data implies that, in 2018, an average of 8.7 individuals committed suicide daily, indicating that approximately every 166 minutes, one person took their own life. The data is derived from euronews.com.



	n	min	mean	median	sd	max	Q1	Q3	skewness	kurtosis
<b>Suicide Numbers</b>	17	2301	2905.882	2816	274.462	3287	2707	3169	0.348	0.656

Table 1. Number of Suicides in Türkiye between 2002-2018

## VII. CONCLUSION

In conclusion, the COVID-19 pandemic, with its stringent measures and pervasive fear, has inflicted significant harm on the mental health of the Turkish population.

This study highlights the staggering rise in anxiety, depression, and suicidal tendencies during the pandemic, echoing the global trend of increasing mental health issues. While the burden of mental disorders was already substantial before the pandemic, the crisis has exacerbated the situation, leading to widespread suffering.

It is clear that a holistic approach is needed to address this complex problem, considering factors such as marital status, employment, economic stability, and societal pressures. In the face of this alarming rise in suicide cases, it is imperative that comprehensive mental health measures and socioeconomic support are put in place to protect the well-being of the population. Turkey's comparatively lower suicide rate in Europe should not overshadow the pressing need for mental health awareness and intervention.

This research underscores the urgent requirement for effective mental health strategies that not only benefit Turkey but also serve as a model for fostering global mental health awareness and support.

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