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A Sociological Analysis of Suicide Rates in Ankara Province (2012-2023)*

*Ankara İlindeki İntihar Vakalarının Sosyolojik Analizi (2012-2023)***

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Abstract

This study examines cases of suicide that occurred in Türkiye and Ankara between 2012 and 2023, through the integration of quantitative data and qualitative findings. The quantitative analysis reveals that crude suicide rates vary significantly based on settlement type, gender, age, marital status, and level of education. District-level analyses within Ankara indicate that suicide rates are relatively higher in the districts of Altındağ and Çankaya, compared to other districts. Suicide rates are seen to be particularly high among men aged 25–44, divorced individuals, and those who have lower levels of education. In-depth interviews conducted with Ankara police officers, along with focus group discussions with social workers and psychologists, provide insights into the primary causes of suicides, the institutional deficiencies that are present relating to suicide intervention, and the experiences of at-risk groups. The study highlights deficiencies in suicide recording systems and insufficient inter-institutional coordination, emphasizing the need for updated standardized categories and enhanced inter-institutional coordination.

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** *Çalışma konsepti ve tasarımı: SY, OÇ, CÖ; veri toplama: CÖ, OÇ; sonuçların analizi ve yorumlanması: SY, OÇ, CÖ; makale taslağının hazırlanması: OÇ. Tüm yazarlar makalenin son halini gözden geçirmiş ve onaylamıştır.*

Qualitative findings underscore the multifaceted impact of modern urban life on suicide cases in Ankara, identifying key contributing factors such as economic instability, the crisis in masculinity, domestic violence, conflicts in close relationships, family pressure, intergenerational tensions, challenges related to social integration, and social isolation. This research contributes to a comprehensive understanding of the complex interplay between the social, economic, and psychological factors influencing suicide by offering the most extensive quantitative analysis of suicide cases in Ankara to date, and then considering that data qualitatively.

Keywords: Crude suicide rates, Ankara, Durkheim, Sociology of suicide, Social service

Öz

Bu çalışma, 2012-2023 yılları arasında Türkiye ve Ankara'da gerçekleşen intihar vakalarını, nicel veriler ve nitel bulguların bir arada analiz ediliği bir yaklaşımla incelemektedir. Nicel analiz, kaba intihar hızlarının yerleşim yeri, cinsiyet, yaş, medeni durum ve eğitim düzeyi özelliklerine göre belirgin şekilde farklılaştığını göstermektedir. Ankara ilinin ilçeleri düzeyindeki analizler, Altındağ ve Çankaya ilçelerinde intihar hızlarının diğer ilçelere nispeten daha yüksek olduğunu ortaya koymaktadır. Özellikle 25-44 yaş arası erkeklerde, boşanmış bireylerde ve eğitim düzeyi düşük bireylerde intihar hızları daha yüksek düzeydedir. Ankara ilinde görev yapan polis memurları ile gerçekleştirilen derinlemesine görüşmeler ve sosyal hizmet uzmanları ve psikologlarla gerçekleştirilen odak grup görüşmeleri ise intiharların temel nedenlerini, intihar vakalarına müdahalede kurumsal eksiklikleri ve risk gruplarının deneyimlerini ortaya koymaktadır. Çalışma, intihar kayıt sistemlerindeki eksikliklere ve kurumlar arası koordinasyon yetersizliklerine dikkat çekerek, güncellenen standartlaştırılmış kategorilere ve geliştirilmiş iş birliğine olan ihtiyacı vurgulamaktadır. Nitel bulgular, Ankara ilindeki intihar vakalarında ekonomik istikrarsızlık, erkeklik krizi, aile içi şiddet, ilişkisel çatışmalar, aile baskısı, kuşaklararası çatışma, sosyal entegrasyon sorunları ve sosyal izolasyon gibi modern kentsel yaşantının çok faktörlü yapısının etkili olduğunu gözler önüne sermektedir. Araştırma, Ankara ilindeki intihar vakalarına yönelik gerçekleşen en geniş çaplı nicel inceleme olmasının yanı sıra konunun nitel bulgularla birlikte değerlendirilmesiyle, intiharın sosyal, ekonomik ve psikolojik faktörlerinin karmaşık etkileşimini kapsamlı bir şekilde anlamaya katkı sağlamaktadır.

Anahtar sözcükler: *Kaba intihar hızı, Ankara, Durkheim, İntihar sosyolojisi, Sosyal hizmet*

Introduction

Suicide is a multifaceted phenomenon that has been the focus of inquiry across diverse academic disciplines, including sociology, psychology, psychiatry, and philosophy. Each of these fields offers unique perspectives and approaches to defining and understanding suicide, reflecting the complexity and diversity of human experiences associated with the conscious act of taking one's own life. Sociological definitions often emphasize the relationship between the individual and society, as exemplified by Émile Durkheim's pioneering work linking suicide to social integration and regulation (Durkheim, 1999/1897). Psychological perspectives, such as those by Edwin Shneidman, highlight the internal dimensions of suffering, focusing on psychological pain and unmet needs (Shneidman, 2004). Meanwhile, cultural and anthropological viewpoints draw attention to the influence of cultural norms, social structures, and historical contexts on suicidal behaviors (Douglas, 2015).

The variations between the definitions of suicide highlight its complexity as a multidimensional phenomenon. According to Masango et al. (2008), suicide is "intentional self-inflicted death," emphasizing the role of deliberate intention and consciousness in the act. Masango et al. stress that suicide is not a random occurrence, but is often perceived as a solution to a profound problem, and this is in alignment with Edwin Shneidman's description of suicide as a "conscious act of self-induced annihilation" (Shneidman, 2004). Similarly, De Leo et al. (2006), drawing from the WHO/EURO Multicentre Study, define suicide as "an act with a fatal outcome which the deceased, knowing or expecting a fatal outcome, had initiated and carried out with the purpose of provoking the changes they desired." This definition underscores intention,

agency, and the awareness of fatal consequences. Both perspectives emphasize intentionality as a core feature of suicide, while situating the act within broader psychosocial and cultural contexts, thus reflecting the multifactorial nature of suicide.

The aforementioned studies also highlight intricate concepts such as suicide, attempted suicide, suicidal ideation, lethality of suicidal behavior, and deliberate self-harm. However, limiting the definition of suicide to fatal cases presents certain challenges. Several studies reveal that non-fatal suicidal behaviors, including suicide attempts, suicidal thoughts, and self-harm, occur at significantly higher rates than actual suicides (Neeleman et al., 2004; Nock et al., 2008; Sayıl et al., 1993; Schmidtke et al., 1996). Additionally, some studies underscore the absence of a universal definition, in addition to the influence of varying cultural contexts, being a cause of certain limitations in the recording of suicide-related events (Alptekin & Duyan, 2021; De Leo et al., 2006; Patrick, 1989).

Care must be taken when studying suicide, particularly when working with statistical data. In this study, the broad definition used by the Turkish Statistical Institute's (TÜİK) in their collection of suicide statistics has been adopted. According to TÜİK, suicide is 'a way of knowingly and willingly killing oneself as a result of an internal conflict occurring within a person's inner psychology.' This definition aligns with the World Health Organization's (WHO) broader definition of 'the act of deliberately killing oneself.' TÜİK specifically emphasizes the psychological dimension; however, this dimension is not entirely aligned with the purpose of this study. The aim here is to explore the social, rather than the psychological, aspects suicide.

Interviews with police units are conducted in this study to better reveal the administrative and social aspects of cases of suicide. These interviews reveal that personnel initially attempt to determine whether or not the case is a homicide. If there is sufficient evidence to indicate that the act was actually suicide, it is recorded as such. If the evidence is considered inconclusive, further investigation is conducted using forensic medicine. As a result, recorded data tends to be related to establishing whether or not a crime occurred, rather the psychological aspects of the suicide. In fact, police units and hospitals tend to classify suicidal acts as result of "illnesses" or unexplained events. However, this can be forgiven when one considers how accurate classification is hindered by the lack of subjective insight into suicide cases.

In summary, TÜİK's official definition of suicide has been chosen for the statistical analysis component of this study. While this definition has limitations, such as providing incomplete information about specific cases, it still allows for the identification of meaningful trends in suicide data.

However, the analysis in the qualitative section of this study, which involves interviews and focus group discussions, is not restricted to this definition of suicide. Instead, the focus is to enable a general understanding of suicidal behavior through discussions with respondents, including the exploration of suicide ideation, self-harm, and suicide attempts. One critical consideration is that actual suicide and suicide attempts represent highly distinct areas of study, with the literature highlighting how the causes and factors leading to actual suicide differ significantly from those associated with suicide attempts. One striking difference is that cases of males who actually commit suicide are at least twice as common as female suicides in many countries worldwide (WHO, 2024), whereas women are more likely to attempt suicide than men (Carretta et al., 2023; Sayıl et al., 1993; Sher, 2022). It is for this reason that the qualitative component of this study examines suicidal behavior more broadly, rather than focusing solely on cases that result in death.

According to the World Health Organization (2024), more than 700,000 people die by suicide each year globally. The total number of deaths from suicide was estimated to be approximately 762,000 in 2000, and this decreased to about 717,000 in 2021. Similarly, the crude suicide rate declined from 12.4 per 100,000 in 2000, to around 9.0 per 100,000 in 2021. In 2000, the Western Pacific region accounted for the highest number of suicides, but by 2021, this shifted to the South-East Asia region. The European region experienced a significant decline in the crude suicide rates, from approximately 21.3 per 100,000 to 12.3 per 100,000 during this period.

Globally, the male-to-female suicide death ratio is more than double, with crude rates of approximately 12.3 for men and 5.9 for women. However, this ratio varies significantly across regions. In the Southeast Asia region, for example, the ratio is low at 1.4, while in the Americas, it is notably higher at 4.0 (WHO, 2024).

Beyond these statistics, suicide is the third leading cause of death among individuals aged 15–29 years, with over 70% of global suicides occurring in low- and middle-income countries. While youth suicide remains a significant concern, suicide rates are often highest among older adults, particularly in high-income countries (Garnett et al., 2023). These age-specific trends highlight the need for targeted prevention strategies that account for varying risk factors throughout life.

Identifying the causes of suicide is complex, as they vary according to the social, cultural, biological, psychological, and environmental factors that exist in different countries. Additionally, a prior suicide attempt, which is much more common than actual suicide, is a significant risk factor for the possibility of future suicide.

The COVID-19 pandemic has further complicated global efforts to prevent suicide. While its direct impact on suicide rates remains under investigation, early evidence, which suggests varied trends across regions, is influenced by factors such as increased mental health challenges, economic instability, and social isolation (Wand et al., 2020). These effects underscore the importance of investing in mental health services and community support systems worldwide.

In Türkiye, the number of deaths from suicide was approximately 1,802 in 2000, but this more than doubled to 4,061 by 2023 (TÜİK, 2024a). During this period, the crude suicide rate increased from 2.80 to 4.76 per 100,000. There was a sharp rise in the male crude suicide rate, which grew from 3.24 to 7.17, while the female suicide rate remained relatively stable, increasing slightly from 2.06 to 2.34. Consequently, the male-to-female suicide rate ratio in Türkiye rose from 1.58 to 3.06, indicating that for every female suicide, there were approximately three male suicides, which exceeds the global ratio by about 2.

Certain regions in Türkiye experienced significant increases in crude suicide rates between 2001 and 2023[1]. Notable regions include West Marmara, where the rate rose from 4.03 to 6.57, Central Anatolia, which increased from 3.11 to 6.00, and Northeastern Anatolia, where the rate grew from 2.83 to 4.72. Additionally, the TR33 Region (Manisa, Afyonkarahisar, Kütahya, Uşak) saw an increase from 2.49 to 5.51, a divergence from the general trend in the Aegean Region. Similarly, the TR62 Region (Adana-Mersin) experienced a rise from 3.16 to 6.50, distinct from the broader Mediterranean Region (Figure 1 and Table A1 in Appendix A).

In Türkiye, the highest crude suicide rates are observed among individuals aged 15–29, which is consistent with global trends (TÜİK, 2024a; WHO, 2024). Male suicide rates peak particularly in the 20–29 age group, while female rates are highest between the ages of 15–24. An additional upward trend is seen in suicide rates for men aged 65 and above.

Ankara has the second-highest number of suicides after İstanbul, followed by İzmir. In 2023, death by suicide totaled 563 in İstanbul, 293 in Ankara, and 251 in İzmir. This ranking has remained consistent over the period considered. In terms of crude suicide rates, Ankara ranked 39th in 2023 (Table 1), aligning with Ankara's similarity to the national average in suicide patterns.

There are several examples of previous studies of suicide trends and related factors in Türkiye. For instance, Alptekin & Duyan (2021) investigated the distribution of crude suicide rates in Türkiye between 2007 and 2016 by focusing on gender, age, marital status, and regional differences. Similarly, Köse (2018), in her master's thesis, compared Türkiye's suicide rates after 2000 with global trends and highlighted sociodemographic variations. Türkkan & Yücel (2024) recently analyzed suicides in Türkiye by examining various sociodemographic factors. Ayla et al. (2019), in their study of Türkiye's suicide numbers from 1980 to 2016, found no significant relationship between economic crises and suicides, while Dilber & Uysal (2020) identified a one-way causal relationship between unemployment and suicide rates in Türkiye from 2005 to 2018. In contrast, Durğun & Durğun (2017) argued that increasing levels of income correlated with higher suicide rates in Türkiye between 1975 and 2015, a finding that contradicts global trends. Lüküslü & Aksoy (2023), in their project report, considered historical trends before concluding that youth suicide was a critical issue.

1 The available data begins in 2001, a year marked by an economic crisis in Türkiye. It is important to note that suicide rates in 2001 were significantly higher compared to 2000 and the following few years.

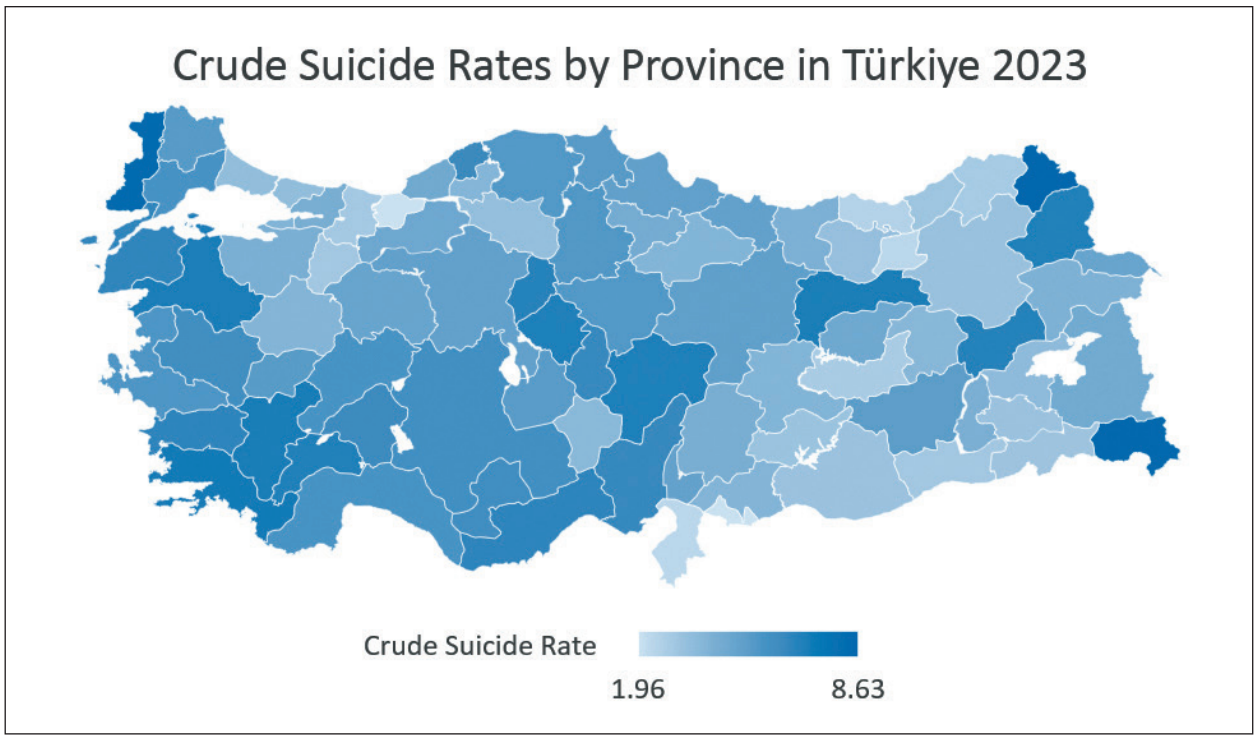

Figure 1. Crude Suicide Rates by Province in Türkiye, 2023.
Source: TÜİK, 2024a.

Table 1. *Crude Suicide Rates by Province in Türkiye, 2023*

Top 10						Bottom 10		
Ranking	Province	Crude Suicide Rate	Ranking	Province	Crude Suicide Rate	Ranking	Province	Crude Suicide Rate
1	Ardahan	8.63	…	…	…	72	Bilecik	3.07
2	Hakkâri	8.53	39	Ankara	5.06	73	Mardin	3.07
3	Edirne	8.39	40	Osmaniye	5.01	74	Sakarya	3.03
4	Muğla	7.19	41	Iğdır	4.84	75	Artvin	2.93
5	Denizli	7.09	42	Eskişehir	4.83	76	Elâzığ	2.84
6	Erzincan	7.04	43	Bolu	4.65	77	Trabzon	2.56
7	Balıkesir	7.03	44	Tunceli	4.61	78	Bayburt	2.35
8	Kayseri	6.93	45	Zonguldak	4.58	79	Hatay	2.35
9	Kırşehir	6.91	46	Van	4.52	80	Kilis	1.98
10	Burdur	6.89	…	…	…	81	Düzce	1.96

Source: TÜİK, 2024a.

In addition to national-level analyses, important studies have also explored suicide at the provincial level. For example, Çiftçi et al. (2020) conducted a survey in Kars that examined patterns of suicide and suicide attempts, and identified individuals over the age of 35, and those with low levels of education, as being high-risk groups. Kayan Ocakoğlu et al. (2020) analyzed the criminal records of 443 cases between 2013 and 2018 in Batman, to reveal similar risk factors, including low education levels and unemployment. Oktik et al. (2003) study of patterns of suicide in Muğla in 2002 and 2003 concluded that issues of adaptation and alienation in a rapidly changing environment were significant contributing factors to suicides.

Many studies specifically focused on Ankara have primarily examined suicide attempts. Sayıl et al. (1993; 1998) were among the first to analyze suicide attempts in the city by utilizing emergency records from nine major hospitals. Their findings revealed that female suicide attempts were twice as frequent as male attempts during the period. Paracioğlu et al. (2004) conducted a longitudinal study on individuals who had attempted suicide which discovered that young people, particularly females, were more likely to attempt suicide, and that such attempts often served as calls for help. Kubali (2007), analyzing hospital records in Ankara, highlighted the influence of biological, cultural, and social factors on suicide attempts. Ercan et al. (2016) examined emergency service records from Ankara in the first half of 2010 and reported a higher prevalence of female suicide attempts, noting that the districts of Keçiören and Mamak had the highest number of attempts. Tatlı et al. (2020) analyzed emergency records from 2017 and 2018, and reported a crude rate of attempted suicide attempt as 50.4 per 100,000, and a crude suicide rate of 2.9 per 100,000 during the period. An interesting finding was that 99% of suicides resulting in death were first-time attempts. Usul et al. (2022), after evaluating Emergency Medical Service data from 2017 to 2019, revealed that approximately 1% of 940,546 cases to which an ambulance was assigned in Ankara involved suicide attempts or completed suicides. This study also highlighted a shift in patterns, with males attempting suicide more frequently during this period.

Studies on suicide in Türkiye predominantly focus on sociodemographic factors, often employing panel regression analyses by considering variables such as unemployment, income, and economic crises. However, a common limitation of these studies is the reliance on total suicide numbers, rather than rates of crude suicide; a methodological choice which significantly limits the ability to understand nuanced suicide patterns. Furthermore, regional or provincial analysis is rare. While examining the whole of Türkiye does provide valuable insights, it overlooks the diverse and distinct patterns that may exist across regions and provinces. Therefore, if behavior relating to suicide in Türkiye is to be correctly understood, a regionally based comparative analysis is required.

Although some studies at the provincial level do exist, they tend to analyze suicide attempt rates derived from hospital records or interviews with participants. To the author's knowledge, no specific analysis of a province has been conducted using suicide statistics, particularly crude suicide rates. This gap is especially apparent in the case of Ankara, where apparently no sociological study has investigated crude suicide rates.

To address this gap, the present study aims to examine suicide patterns in Ankara from 2012 to 2022 - and in 2023 where data is available- by analyzing various dimensions, including gender, age groups, educational levels, marital status, districts, and possible causes. Through this approach, the study seeks to provide a more comprehensive understanding of suicide patterns in Ankara.

While this study focuses empirically on the statistical and institutional analysis of suicide in Ankara, it is crucial to situate this investigation within broader sociological discussions. The classical sociological framework provided by Durkheim, which continues to influence suicide research today, has been critically revisited and expanded to consider contemporary transformations, including gender dynamics, digitalization, and urban life.

The following section outlines key contemporary contributions to the sociological study of suicide, both to address the limitations of earlier models and to provide sociological orientation to this study.

Revisiting Durkheim: Contemporary Extensions and Critiques

This section builds on Durkheim's foundational model which focuses on the phenomenon of suicide with respect to different topics such as gender, alcohol abuse, modernity, digitalization, social media, and urban life. The aim of the following discussions is to enable the reader to appreciate both how the context has changed, and how it has remained the same, since Durkheim's model.

According to Khan et al. (2021), more men die from suicide, despite women making more attempts on their own lives. Khan et al. underline that Durkheim explained this disparity by attributing greater intellectual and moral capacity to men, and by framing women as more asocial and emotionally driven, and thus less influenced by social integration. Durkheim argued that women's traditional roles of caregiving and family shield them from the social pressures which contribute to suicide. In today's social context, this view is considered not only inaccurate, but actually quite discriminative. Feminist scholars have since critiqued Durkheim's views as being outdated and rooted in patriarchal and essentialist assumptions that deny women agency and rationality. Furthermore, his claims are not strongly supported by empirical evidence and, in some contexts, women's suicides are actually more a result of social change than men's (Khan et al., 2021, p.13).

The adverse impact of alcohol abuse on the incidence of suicidal tendencies is argued to be among the most underestimated effects by Durkheim (Kołodziej-Sarzyńska et al., 2019). Though the studies confirm that this impact of alcohol abuse "seems to be the most pronounced in countries where high-proof alcohol is the dominant beverage of choice" (p.877), it is significant to consider the relationship between poor social integration and alcohol abuse in the context of Türkiye today. Many of the points mentioned by Durkheim were also raised in our focus group discussions: "modern researchers see the huge impact of harmful alcohol consumption on the increase in suicidal tendencies, both by chronic negative social effects – family breakdown, problems with maintaining employment, and increasing the risk of aggressive and self-aggressive behavior due to acute poisoning" (p.874).

Due to his structural functionalist approach, Durkheim's considers the cause of suicide to be related to externally oppressive social issues. Although his theoretical framework is still often used and discussed, many researchers challenge this structural approach of Durkheim as his orthodox view "has become untenable as four decades of mounting evidence indicate that suicides can spread between individuals" (Mueller & Abrutyn, 2015, p.205). The individualization of individuals due to the effects of modernity in the contemporary world, in addition to how suicidal tendencies can disseminate among individuals, are both significant factors for analyzing how social integration is affecting suicide, especially in how it can be be socially contagious among adolescents (Mueller & Abrutyn 2015). Social media is another factor in the dissemination of suicidal tendencies, and how they should be discussed in relation to Durkheimian conceptual framework on suicide.

Contemporary sociological research has revisited Durkheim's foundational theories on suicide to explore how modern phenomena such as digitalization, social media, and urban life, influence social integration and regulation. A recent study by Ferguson (2021) extends Durkheim's framework to incorporate these modern sociological factors and analyze how the rise of digital suicide contagion, mental health concerns, and social isolation in hyper-connected societies affect suicide rates. The study suggests that while Durkheim's typology remains relevant, it requires adaptation to account for how new forms of anomie are being introduced by digital and urban environments and traditional social norms are disrupted.

Methodology

The following research questions are the basis of this study: (1) What are the temporal and demographic trends in suicide rates in Ankara between 2012 and 2023? (2) How do suicide rates vary by gender, age, educational attainment, and marital status? (3) Which districts in Ankara exhibit higher suicide rates, and what patterns emerge at the sub-provincial level? (4) What insights can be drawn from qualitative interviews regarding institutional responses to suicide and the perceived causes of suicidal behavior? Instead of adopting a mixed-methods framework, the study obtains more detailed contextual information through the combination of statistical descriptive analysis with qualitative descriptive interviews conducted with public officials and experts. As the research is both exploratory and descriptive in nature, it does not propose or test specific hypotheses, but instead merely seeks to identify and present patterns in suicide data and institutional perspectives.

This study uses suicide statistics provided to the public annually in June by the Turkish Statistical Institute (TURKSTAT) in the "Death and Causes of Death News Bulletin.", to conduct a descriptive analysis of suicide statistics in Ankara province. In the TURKSTAT bulletin, suicide numbers are presented at the Nomenclature of Territorial Units for Statistics (NUTS) level. However, detailed breakdowns of suicide numbers by district, gender, age group, educational level, marital status, and

reasons for the period are not available. Therefore, while certain data at the provincial level for Ankara has been provided, more detailed data can only be accessed upon request from TURKSTAT.

Since, by its very nature, data on suicide cannot directly be obtained from the subject, suicide statistics help in the determination of the social dynamics which can lead to suicide. For this reason, detailed suicide statistics were obtained to enable the analysis of trends at the provincial and sub-provincial levels. However, it should be noted that several limitations are created by statistics on suicide depending on second-hand police records. One of these limitations is that little to no insight is provided in the more than half of the recorded suicide causes which are categorized as "unknown", "illness", or "other". This makes it necessary to develop alternative approaches to understanding suicide. While previous studies that have examined detailed hospital or police reports have provided valuable examples for overcoming the limitations of official suicide statistics, such studies are typically confined to the records of a single hospital or a limited number of district police departments, and thus are not representative at the city or national level. Nonetheless, additional research of this kind could offer crucial support in addressing the limitations of TURKSTAT's data—particularly regarding the causes of suicide. To help address this limitation, qualitative data was gathered from interviews with relevant public servants.

It is important to note that the categories used for suicide in official statistics are insufficient to understand the actual reasons behind suicide. Moreover, such categories have serious limitations when it comes to the identification of general trends within the population, as more than half of the recorded causes are either unreliable or unspecified. This aligns with the sociological approach of the study, which seeks to uncover structural and social determinants rather than individual motivations—an aim also favored by Durkheim in his seminal work.

Within the scope of this research, statistics relating to suicide for the years 2012–2023 were obtained, upon request, from the Turkish Statistical Institute (TÜİK) through Social Sciences University of Ankara on March 1, 2024, and July 30, 2024. The scope of suicide data was expanded in 2012, following efforts made by TÜİK to improve data collection. While the expansion may seem modest, limiting the analysis to a more recent historical period offers certain advantages. Focusing on a single decade better allows for the identification of meaningful trends and patterns, thus providing valuable insights into the dynamics of how suicide has changed over time. Additionally, concentrating on a well-defined and recent decade enhances the relevance and clarity of the analysis. Although the study primarily focused on the 2012–2022 period, data from 2023 was used to provide further clarification when available.

Descriptive statistical analysis was applied in this study to provide a general description and identify recurring trends. As an exploratory study, this work highlights the need for further statistical analysis. Common statistical analyses used in suicide research usually includes correlation analyses, regression models, time-series evaluations, and spatial comparisons. Researchers often investigate meaningful relationships between suicide rates and indicators such as regional development indices, economic crises, levels of happiness, or other relevant measures, disaggregated by variables such as gender, age, or occupational status. While such an approach would constitute a distinct, focused line of research, the aim of this study was limited to an exploration and presentation of descriptive statistics within the defined scope.

In addition to analyzing quantitative data on suicide, face-to-face interviews and focus group discussions were conducted with personnel from police units and social service centers to consider their responses to suicide cases.[2] Semi-structured interviews and in-depth interviews were conducted with three personnel from the Ankara Provincial Directorate of the Ministry of Family and Social Services (ASHB) and two personnel from the Homicide Bureau of the Ankara General Directorate of Security (EGM). Furthermore, a focus group discussion was held with psychologists working in the Social Service Centers in the eight districts[3] with the highest number of suicides. Different themes and sets of questions sets

2 This study was approved by the Social Sciences and Humanities Research and Scientific Publication Ethics Committee of the Social Sciences University of Ankara (Date: 03.06.2024, Issue Number: 118092)

3 Çankaya, Keçiören, Yenimahalle, Etimesgut, Mamak, Altındağ, Sincan and Polatlı (Ranked according to number of suicides occurred in 2022 in districts of Ankara)

were prepared for police units and Social Service Centers, while qualitative data was gathered for analysis under distinct thematic categories.

The selection of participants was neither random nor intentional. Once the application for interviews was submitted, related ministries and departments assigned personnel to the study, and it was noticed that the ministry had carefully chosen participants with professional expertise and interest in the topic. Experienced psychologists, who were from the different districts of Ankara Social Service Centers directly involved in handling suicide cases, explained that their primary function was to provide necessary services to the family members left behind after a suicide, particularly women and children. They had also occasionally provided assistance to individuals who had attempted suicide. Personnel from police departments experienced in handling suicide cases offered numerous valuable insights during the interview.

The limited selection of official personnel interviewed in this study resulted from both the time constraints imposed by legal procedures and the study's primary focus on official statistical data. Therefore, it must be emphasized that the qualitative data derived from interviews and focus group discussions is not representative, and reflect only the experiences of a small group of selected individuals. While the professional expertise of these participants provided valuable insights into legal procedures and the role of state institutions, a more comprehensive approach would require the inclusion of a broader range of professionals. These might include physicians, psychiatrists, and specialists from the Ministry of Health; personnel from the Ministry of Interior; experts affiliated with the Ministry of Education and the Ministry of Youth and Sports; representatives from the Ministry of Justice; the Directorate of Religious Affairs; university-affiliated psychiatric clinics; and non-governmental organizations. It is suggested that future research highlight the institutional structures and inter-organizational relations surrounding suicide prevention, thus recognizing the multitude of actors involved in this field.

In-depth information was obtained through these interviews on the general situation of both completed suicides and suicide attempts in Ankara. The findings and conclusions of the study are based on both the quantitative data obtained from TÜİK and the qualitative data gathered from the interviews.

Findings

Statistical Data on Suicides[4]

Crude Suicide Rates in Türkiye and Ankara: The crude suicide rate in Türkiye increased from approximately 2 per 100,000 in 1975 to 5 per 100,000 in 2023. This trend was marked by three distinct phases: between 1980 and 2000, the rate rose gradually, reaching 3 per 100,000; in 2001 it spiked to 4 per 100,000, where it stabilized until 2011; and in 2012 there was a further sharp increase, culminating in a rate of 5 per 100,000 by 2022 (Figure 6).

Although a direct causal link cannot be definitively established, the dates of these increases align with significant societal crises, including the 1980 military coup, the 2001 economic crisis, the 2018 foreign exchange crisis, and the COVID-19 pandemic in 2020. The spike in 2012 may also be attributed to expanded suicide data collection[5]. While administrative changes in data recording influenced rates, the sustained upward trend after 2012 suggests that broader societal factors are in play.

Comparing suicide data across 1975–2023 is challenging due to revisions in data collection methods. A more accurate approach is to analyze the 2012–2023 period separately from 1975–2012. However, the significant increase of recent years cannot be fully explained by methodological changes, indicating that there are other contributing factors.

Gender Differences in Suicide Rates: Historically, male suicide rates in Türkiye closely paralleled overall rates (Figure 2). However, starting in 2001, male rates began diverging from other rates, particularly after the data expansion of 2012. From 2018 onward, male rates increased sharply, reaching 8 per 100,000 by 2021, and nearing the

4 All figures and tables presented in this study were created by the authors based on the collected data.

5 Data related to suicide statistics by location have been collected since 2012 from the General Directorate of Security (EGM) and the Gendarmerie General Command (JGnK) based on national identification numbers. The suicide records obtained from the EGM and JGnK's databases, based on national identification numbers, have been matched and deduplicated with records from the Turkish Statistical Institute (TÜİK) cause-of-death data, the Ministry of Justice's Directorate General of Prisons and Detention Houses, and the Ministry of National Defence General Staff records. This process has expanded the scope of suicide statistics since 2012 (TÜİK, 2023).

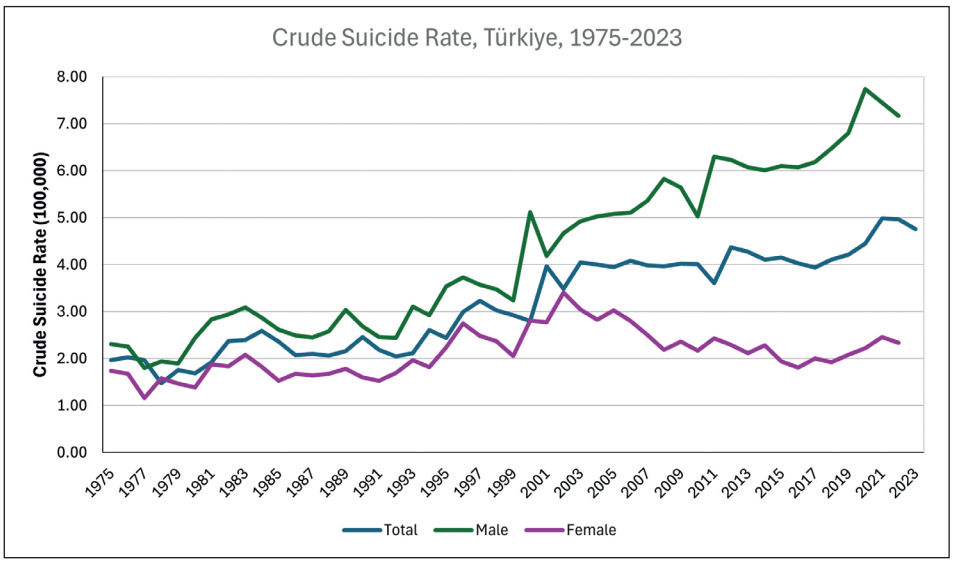

Figure 2. Crude suicide rate by gender in Türkiye between 1975-2023. Source: TÜİK, 2024b.

global average of 9 per 100,000 (WHO, 2021). Female suicide rates, by contrast, followed a different trajectory, peaking at 3 per 100,000 in 2003 before declining and stabilizing slightly above 2 per 100,000. This divergence underscores the growing role of male suicides in driving up overall rates (Figure 3 & Figure 4).

Data for Ankara, available since 2000, generally closely mirrors national trends. However, the male suicide rate in Ankara did peak at 8 per 100,000 in 2002, significantly exceeding the national average of 5 per 100,000 that year. Since 2018, male suicide rates in Ankara have risen rapidly, reaching approximately 8 per 100,000, while total and female rates have remained consistent with national averages. At no other time has the male crude suicide rate in Ankara diverged so sharply from the national average (Figure 5).

Durkheim's observed male-to-female suicide ratio of 4:1 has remained general valid across societies. However, in Türkiye, this ratio remained below 2 until 2003, after which it rose to 3 by 2016. While it has not reached 4:1, Türkiye's ratio of roughly 3:1 reflects global gender disparities. In Ankara, this ratio has fluctuated significantly, peaking at 5:1 in 2016 and declining to 3:1 by 2023, aligning with the national average (Figure 7).

However, if we assume the reliability of pre-2000 recorded data, the male-to-female crude suicide rate ratio in Türkiye remained below 2 for many years. However, this ratio began to increase after 2003, surpassing 3 by 2016, but it has never reached the 4:1 ratio identified by Durkheim. It can be said that there has been roughly one female suicide for every three male suicides in Türkiye over the past decade.

Therefore, while the male-to-female suicide ratio in Türkiye has remained around 3:1 over the past decade, there have been notable spikes in Ankara during certain years, with men dying by suicide at much higher rates than women. This greater tendency to die by suicide during such times suggests that men in Ankara may be more responsive to periods of crisis compared to the male population nationwide.

It can therefore be seen that while the male-to-female suicide ratio in Türkiye has remained around 3:1 over the past decade, there have been notable spikes in Ankara during certain years, with men dying by suicide at much higher rates than women. This suggests that men in Ankara may be more responsive to periods of crisis compared to the male population nationwide, showing a greater tendency to die by suicide during such times.

District-Level Analysis in Ankara: Suicide trends in Ankara's districts highlight significant variations. Below are the suicide numbers and crude suicide rates, by gender, for the 10 most populous districts in Ankara with the highest suicide rates (Table 2). As population and suicide numbers decrease below the provincial level, making

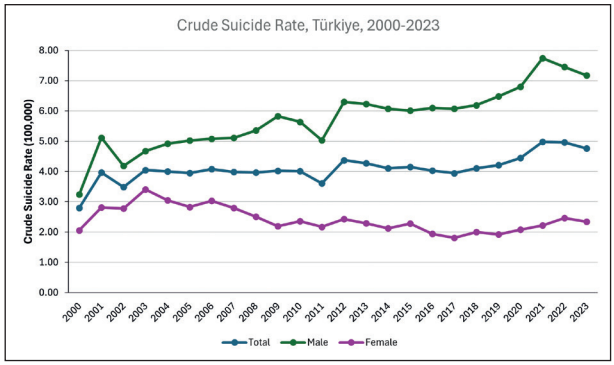

Figure 3. Crude suicide rates in Türkiye, 2000-2023.
Source: TÜİK, 2024b.

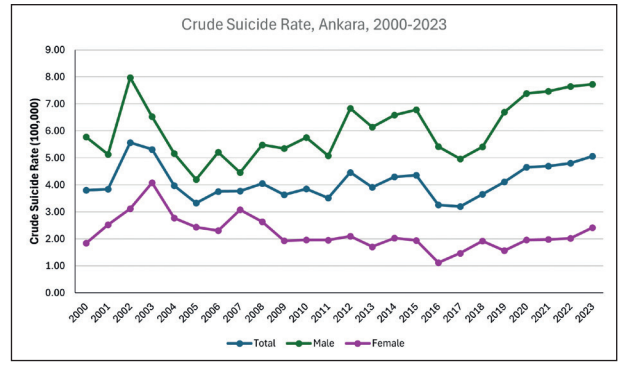

Figure 4. Crude suicide rates in Ankara, 2000-2023.
Source: TÜİK, 2024c.

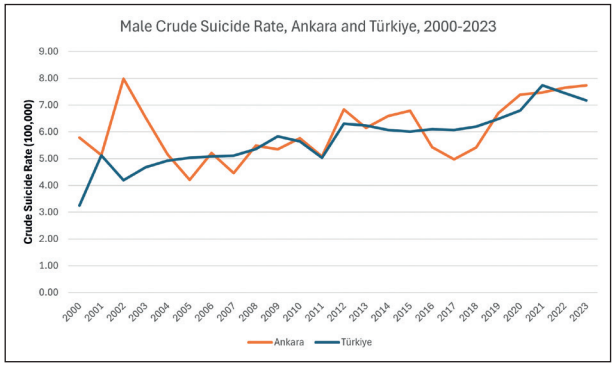

Figure 5. Male crude suicide rates in Ankara and Türkiye, 2000-2023.
Source: TÜİK, 2024b.

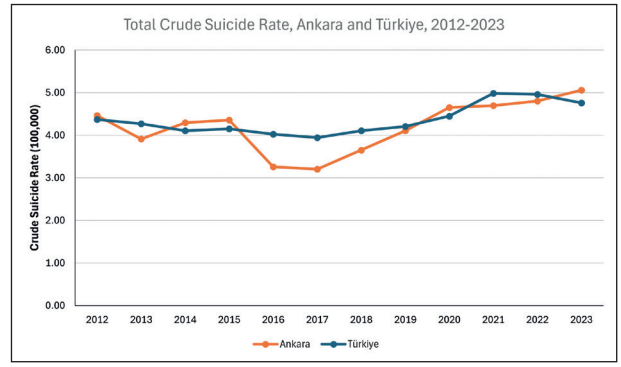

Figure 6. Total crude suicide rates in Ankara and Türkiye, 2012-2023.
Source: TÜİK, 2024b.

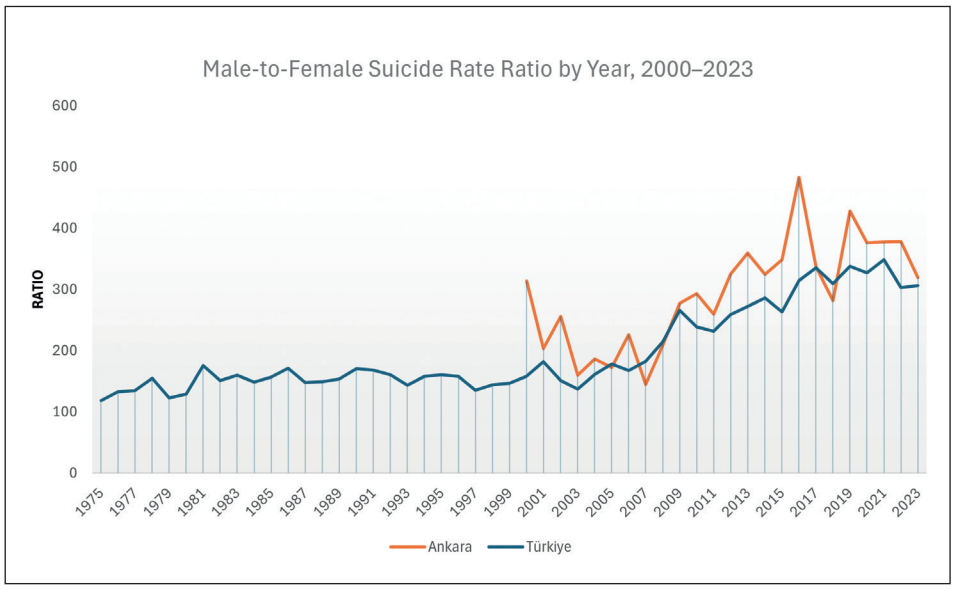

Figure 7. Male to female suicide rate ratio by year 2000-2023.
Source: TÜİK, 2024b.

meaningful estimates becomes more challenging. To protect individuals' privacy, TÜİK has concealed cases with suicide counts of 3 or fewer by marking them with a "c."

In districts other than the aforementioned, suicide numbers are very low and often marked as "c," making it impossible to derive meaningful ratios. However, the select-

Table 2. *Crude Suicide Rates (100,000) by Gender and Districts in Ankara, 2012-2022*

Districts	Gender	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Türkiye	*Total*	4.37	4.27	4.11	4.15	4.03	3.94	4.11	4.21	4.45	4.98	4.96	4.33
	Male	6.30	6.23	6.07	6.01	6.10	6.07	6.19	6.48	6.80	7.74	7.45	6.49
	Female	2.43	2.29	2.12	2.28	1.94	1.81	2.00	1.92	2.08	2.22	2.46	2.14
Ankara	*Total*	4.46	3.92	4.30	4.36	3.26	3.21	3.65	4.11	4.65	4.70	4.81	4.13
	Male	6.84	6.14	6.59	6.79	5.42	4.97	5.41	6.70	7.39	7.47	7.65	6.49
	Female	2.10	1.71	2.03	1.95	1.12	1.47	1.92	1.57	1.96	1.98	2.02	1.80
Çankaya	*Total*	4.98	4.81	4.49	5.34	4.24	3.37	3.47	5.25	6.09	5.65	5.81	4.86
	Male	6.77	8.25	6.10	8.09	7.22	5.44	4.74	8.71	10.02	9.11	9.94	7.67
	Female	3.30	1.56	2.97	2.75	1.46	1.46	2.30	2.06	2.47	2.46	2.03	2.26
Keçiören	*Total*	5.26	4.38	3.37	3.29	2.45	3.40	3.50	3.68	6.39	3.19	4.46	3.94
	Male	8.97	6.96	5.42	5.29	4.52	4.90	4.90	6.39	10.20	5.42	6.95	6.36
	Female	1.65	1.87	1.38	1.34	c	1.95	2.15	1.06	2.72	1.04	2.08	1.73
Yenimahalle	*Total*	3.54	4.38	4.00	4.35	2.82	2.91	4.23	3.26	3.33	5.29	5.25	3.94
	Male	6.03	6.72	4.77	7.24	5.12	4.08	6.50	4.86	5.93	8.80	7.89	6.17
	Female	1.16	2.14	3.26	1.58	c	1.80	2.07	1.73	0.85	1.95	2.76	1.93
Etimesgut	*Total*	4.04	1.79	5.15	3.30	1.68	1.98	4.04	3.11	2.20	2.66	4.26	3.11
	Male	6.50	3.10	8.98	5.40	3.35	2.88	5.61	4.14	3.05	4.67	6.26	4.90
	Female	1.46	c	1.25	1.17	c	1.08	2.47	2.07	1.35	c	2.28	1.64
Mamak	*Total*	4.29	3.72	3.29	5.69	3.24	3.33	4.98	5.48	4.64	4.44	4.38	4.32
	Male	6.00	4.94	5.18	8.34	4.53	5.07	8.10	8.84	7.51	7.13	7.64	6.66
	Female	2.54	2.50	1.39	3.02	1.95	1.58	1.87	2.13	1.79	1.77	1.16	1.97
Altındağ	*Total*	5.21	4.15	6.38	4.14	5.48	3.80	3.24	5.53	7.38	9.45	4.14	5.35
	Male	8.19	5.50	10.47	5.47	8.70	5.38	4.28	9.93	10.11	13.36	5.80	7.93
	Female	2.20	2.78	2.23	2.78	2.21	2.19	2.18	c	4.62	5.51	2.45	2.91
Sincan	*Total*	3.17	2.49	5.29	3.78	2.15	1.54	2.11	1.71	2.95	2.88	3.35	2.86
	Male	3.74	3.26	8.79	6.64	3.06	3.00	3.01	2.23	5.43	3.89	5.52	4.42
	Female	2.58	1.69	1.66	c	1.20	c	1.17	1.16	c	1.83	1.08	1.55
Gölbaşı	*Total*	6.49	3.53	9.39	4.99	4.07	2.36	2.27	4.39	3.58	4.23	2.05	4.30
	Male	7.30	6.92	13.38	6.53	7.95	4.65	4.50	8.71	5.68	8.42	c	7.40
	Female	5.66	c	5.23	c	c	c	c	c	c	c	4.10	4.99
Pursaklar	*Total*	5.12	c	c	5.32	4.42	8.57	2.80	2.04	3.25	5.05	3.73	4.48
	Male	6.77	c	c	9.07	7.32	12.81	5.60	c	5.20	6.32	3.74	7.10
	Female	c	c	c	c	c	4.30	c	c	c	3.78	3.71	3.93
Polatlı	*Total*	4.19	7.60	2.52	3.29	7.37	c	4.86	4.85	2.38	6.30	8.60	5.20
	Male	4.98	11.73	c	4.90	11.42	c	8.04	6.44	c	9.46	12.53	8.69
	Female	c	c	c	c	c	c	c	c	c	c	4.68	4.68

Source: TÜİK, 2024c.

ed 10 districts provide valuable insights as they account for approximately 85% of suicides in Ankara.

Çankaya, Keçiören, Yenimahalle, Mamak, and Altındağ are primary contributors to Ankara's crude suicide rate. Çankaya, with a population of approximately 938,000, which accounts for about 16% of Ankara's total population, has consistently exhibited a crude suicide rate higher than the overall rate for Ankara between 2012 and 2022. While the trends observed at the national and provincial levels also apply to Çankaya, the male crude suicide rate in this district is notably high. For instance, it reached 8.25 in 2013, 8.09 in 2015, and 8.71 in 2019, while peaking at 10.02 in 2020 (Table 2).

In Keçiören, the male crude suicide rate was 8.97 in 2012, before peaking at 10.20 in 2020. Yenimahalle saw rates of 8.80 and 7.89 in 2021 and 2022, respectively. In Mamak, the male crude suicide rate reached 8.34 in 2015, 8.10 in 2018, and 8.84 in 2019. In Altındağ, the rate was 10.47 in 2014, 9.93 in 2019, and 10.11 in 2020, before peaking at a remarkably high 13.36 in 2021 (Table 2).

In other districts, such as Etimesgut, Sincan, Gölbaşı, Pursaklar, and Polatlı, suicide numbers are relatively low, leading to fluctuations in suicide rates that make it difficult to identify clear trends. These districts require separate analysis.

Examining the trends in Ankara's five largest districts between 2012 and 2022, Altındağ had the highest average total suicide rate (5.35 per 100,000), followed by Çankaya (4.86), Mamak (4.32), Keçiören (3.94), and Yenimahalle (3.94). Male suicides were the primary drivers, with Altındağ again leading at 7.93, followed by Çankaya (7.67). These findings suggest Altındağ, Çankaya, and Mamak are high-risk districts for male suicides, likely exacerbated by societal factors conductive to suicide (Table 2).

Female suicides remain low across districts, limiting meaningful analysis. However, suicide attempts, often more frequent among women, offer an important area for further research. It is well-documented that men are more likely to die by suicide, while women attempt suicide at higher rates. The qualitative findings section provides further insights into these dynamics, emphasizing the need to distinguish between completed suicides and attempts.

Suicide Rates Among Males by Age in Ankara (2012–2023): The average crude suicide rate among males aged 15–24 in Ankara from 2012 to 2023 was 7.45 per 100,000. The rate peaked in 2012 at 9.01 per 100,000. There was a decline between 2012 and 2018, followed by the rate increasing until it exceeded 8 per 100,000 from 2019 onwards (Figure 8).

The crude suicide rate among males aged 25–34 in Ankara between 2012 and 2023 averaged 9.65 per 100,000, marking the highest rate among all age groups. While the rate remained above 8 per 100,000, it rose significantly after 2018, reaching a remarkably high level of 13.23 per 100,000 in 2023 (Figure 9).

The average crude suicide rate among males aged 35–44 in Ankara was 8.13 per 100,000. The rate remained around 8 per 100,000 between 2012 and 2016, declined from 2017 to 2020, but experienced a sharp increase after 2021. By 2022, the rate had risen to 10.66 per 100,000,

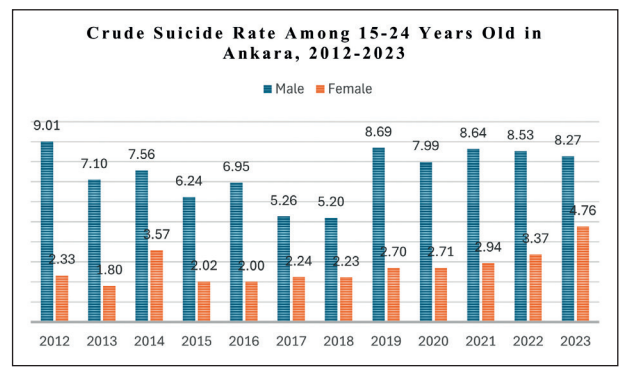

Figure 8. Crude suicide rate among 15-24 years old in Ankara, 2012-2023.
Source: TÜİK, 2024d.

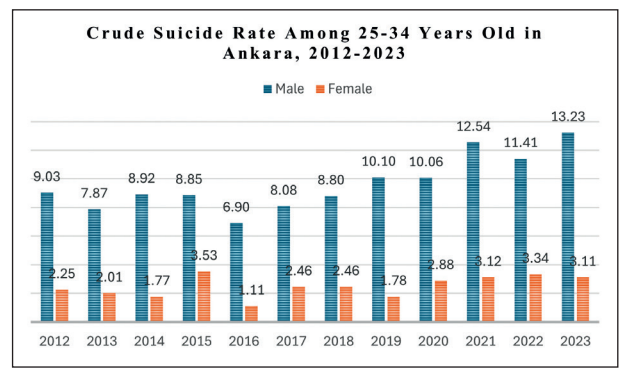

Figure 9. Crude suicide rate among 25-34 years old in Ankara, 2012-2023.
Source: TÜİK, 2024d.

reaching a critical level of 14.20 per 100,000 in 2023. This represents a nearly twofold increase in the crude suicide rate for this age group between 2021 and 2023 (Figure 10).

Among males aged 45–54 in Ankara, the average crude suicide rate from 2012 to 2023 was 7.51 per 100,000. The lowest rate was recorded in 2023 at 5.31 per 100,000, while the highest occurred in 2020 at 9.97 per 100,000. This age group experienced notable increases in suicide rates, particularly in 2020 and 2021 (Figure 11).

For males aged 55–64, the average crude suicide rate during the same period was 8.29 per 100,000. Significant spikes were observed in 2015 and 2020 when the rates rose to 12.27 and 12.04 per 100,000, respectively. The rate also exceeded 9 per 100,000 in 2013 and 2022. In other years, the trend remained relatively stable (Figure 12).

The average crude suicide rate among males aged 65 and over in Ankara was 8.63 per 100,000, making it the second highest among all age groups. However, the classification of data as "c" in 2016 and 2017, indicating fewer than five cases, raises concerns about potential issues in data recording. Given the parallel trend between this age group and the 55–64 age group, a measurable suicide rate, even if below average, would typically be expected during these years (Figure 13).

Despite these data limitations, significant findings emerge. In 2015, the suicide rate for males aged 65 and overreached its highest recorded level of 13.74 per 100,000. Another significant increase was observed in 2020, with a rate of 12.37 per 100,000. In the years immediately preceding and following, the rates were 10.27 and 10.86 per 100,000, respectively (Figure 13).

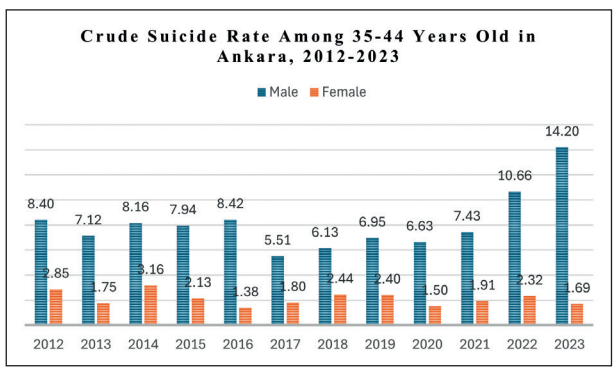

Figure 10. Crude suicide rate among 35-44 years old in Ankara, 2012-2023.
Source: TÜİK, 2024d.

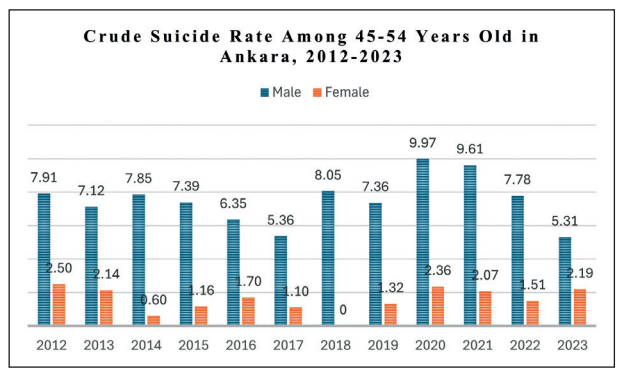

Figure 11. Crude suicide rate among 45-54 years old in Ankara, 2012-2023.
Source: TÜİK, 2024d.

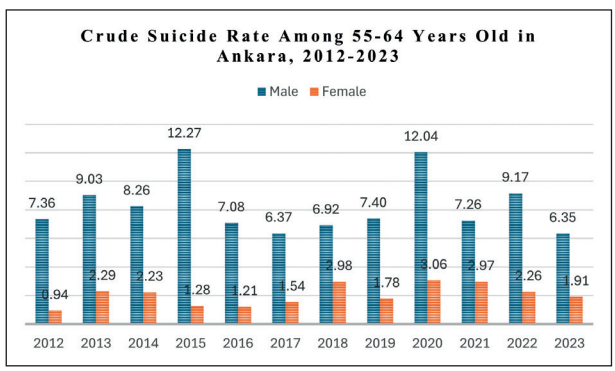

Figure 12. Crude suicide rate among 55-64 years old in Ankara, 2012-2023.
Source: TÜİK, 2024d.

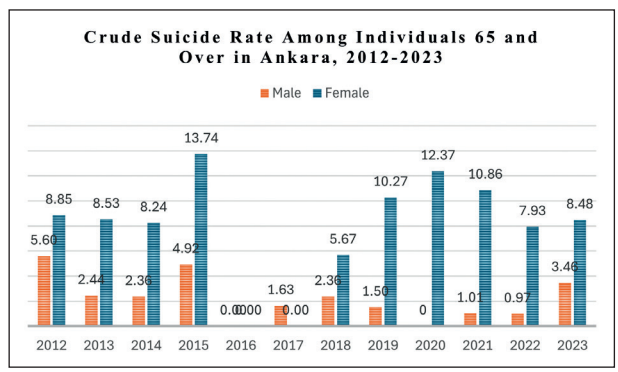

Figure 13. Crude suicide rate among individuals 65 and over in Ankara, 2012-2023.
Source: TÜİK, 2024d.

Our analysis of crude suicide rates among males in Ankara from 2012 to 2023 across different age groups reveals notable trends. In all age groups, significant increases in suicide rates were observed during the five years following 2018. There were particularly sharp increases in the rates for males aged 25 to 45, compared to other groups. The most substantial rise in suicide rates among men aged 45 and older occurred in 2020.

When categorizing the population into two groups, those under 45 and those 45 and older, it becomes evident that the increase in suicide rates for the latter group coincided with the 2020 pandemic. In contrast, the rise among younger males primarily aligns with the post-pandemic period, which was characterized by a deepening economic crisis. Furthermore, a sharp spike in suicide rates among males aged 55 and older in 2015 is noteworthy. This year coincided with two significant elections in Türkiye, as well as the Ankara train station bombing, at which times political tensions in Türkiye were highly charged.

These findings indicate that suicide trends among males in different age groups reflect varying responses to societal crises. However, as will be detailed below, determining the specific causes of individual suicides presents significant challenges. Although a detailed table of suicides by age group and cause is available for the 2012–2023 period, most cases are classified under "Illness" or "Unknown." (Figure B1 in Appendix B). Field insights related to these categories will be elaborated in the Qualitative Findings section.

Suicide Rates Among Females in Ankara (2012–2023): An analysis of female suicide rates in Ankara between 2012 and 2023 across different age groups reveals a pattern distinct to that of males. Although female suicide rates are much lower than those of males, certain trends are evident.

The highest average crude female suicide rate of 2.72 per 100,000 was observed in the 15–24 age group. In contrast, the highest rate for males was in the 25–34 age group. Between 2012 and 2018, the suicide rate for females in this younger group remained stable, except for a sharp increase in 2014, when it rose to 3.57 per 100,000. The upward trend after 2018 also applies to this group, with the rate increasing steadily from 2019 and peaking at 4.76 per 100,000 in 2023 (Figure 8).

For females aged 25–34, the average crude suicide rate was 2.48 per 100,000. The highest rate in this age group occurred in 2015, at 3.53 per 100,000. In all other years, the rate remained below 3 per 100,000. However, starting in 2020, the rate began to rise, reaching 3.12 per 100,000 in 2021, 3.34 in 2022, and 3.11 in 2023 (Figure 9).

The average crude suicide rate for females aged 35–44 in Ankara during the period was 2.11 per 100,000, with the highest rate of 3.16 per 100,000 recorded in 2014. While there were minor increases in 2018, 2019, and 2022, the rate generally remained stable (Figure 10).

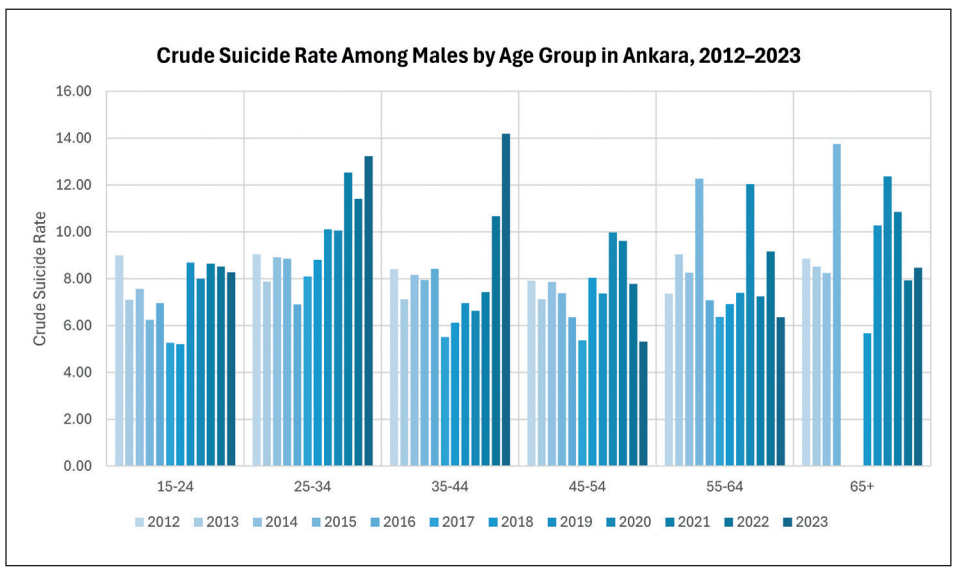

Figure 14. Crude suicide rate among males by age group in Ankara, 2012-2023.
Source: TÜİK, 2024d.

In the 45–54 age group, the average crude suicide rate was 1.70 per 100,000, the lowest among all age groups. The rate stood at 2.50 per 100,000 in 2012 and 2.14 per 100,000 in 2013, but dropped significantly thereafter, remaining well below 2 per 100,000 between 2013 and 2020. A notable increase was observed in 2020 (Figure 11).

For females aged 55–64, the average crude suicide rate was 2.04 per 100,000. Significant increases were observed in 2018 and 2020, with the rates rising to 2.98 and 3.06 per 100,000, respectively. The rate subsequently declined to 2.97 per 100,000 in 2021 and 2.26 per 100,000 in 2022 (Figure 12).

Among females aged 65 and older, the average crude suicide rate was 2.63 per 100,000, the second highest among all age groups. The rates of 5.60 per 100,000 in 2012, and 4.92 per 100,000 in 2015, were the highest recorded across all years and age groups. Another sharp increase occurred in 2023, with a rate of 3.49 per 100,000. In most years, the number of suicides in this age group was five or fewer; however, in 2012, 2015, and 2023, the number rose to 11, making these years particularly noteworthy (Figure 13).

An analysis of female crude suicide rates in Ankara from 2012 to 2023 across age groups reveals significant differences compared to males. The highest suicide rate among females is observed in the youngest group, aged 15–24, whereas males reach their peak in the 25–34 age group. Among females aged 65 and older, the second-highest rates are recorded, marked by dramatic increases in three specific years. Both age groups experienced sharp spikes in 2023, while for males, the 25-45 age group was particularly affected in the same year (Table 3).

Suicide rates among females aged 35–44 and 55–64 remained relatively low, though an increase was noted for the 55–64 group starting from the pandemic year of 2020. In the 65 and older group, both males and females experienced a sudden rise in 2015. Unlike males, females in the 15–24 and 35–44 age groups saw abrupt increases in 2014, while 2015 was a pivotal year for the 25–34 group (Figure 14).

These findings suggest that both age and gender influence changes in suicide tendencies during societal crises. Moreover, unlike males, female suicides may be influenced by crises that are harder to define, such as those with political or economic dimensions. The increases in suicide rates among females aged 65 and older in 2012 and 2023, along with the significance of 2014 for multiple age groups, underscore this complexity. Additionally, the difficulty of identifying direct causes of suicides is more pronounced for females, as errors in recording a small number of cases can lead to significant distortions in the data.

Analysis of Total Crude Suicide Rates in Ankara by Level of Education (2012–2022): An analysis of total crude suicide rates in Ankara between 2012 and 2022 by level of education shows that the highest rates occurred in the *Primary Education* and *Middle School or Equivalent* categories. However, before interpreting these rates, it is essential to consider the significant shifts in the population's educational composition during this period.

In 2012, approximately 51.7% of Ankara's population had an education level of *Primary Education or below*. By 2022, this proportion had decreased substantially to about 31.6%. Conversely, the share of the population with *High School or Equivalent and above* education rose from roughly 40% in 2012, to 53.2% in 2022 (Table 4).

Table 3. *Average Crude Suicide Rate in Ankara Across Age Groups, 2012-2023*

Age	Total	Male	Female
15-24	5.14	7.45	2.72
25-34	6.06	9.65	2.48
35-44	5.08	8.13	2.11
45-54	4.58	7.51	1.70
55-64	5.11	8.29	2.04
65+	5.09	8.63	2.63

Source: TÜİK, 2024c.

Table 4. *Population by Level of Education in Ankara, 2012 and 2022*

	2012		2022		
	n	%	n	%	Percentage Point Change
Primary School or Below	1,627,185	36.1	1,397,389	26.7	**-9.3%**
Primary Education	702,232	15.6	235,726	4.5	**-11.1%**
Junior High School and Equivalent	239,604	5.3	772,501	14.8	**9.5%**
High School and Equivalent	1,053,645	23.3	1,370,349	26.2	**2.9%**
Higher Education	755,353	16.7	1,409,779	27.0	**10.2%**
Unknown	134,942	3.0	43,222	0.8	**-2.2%**
Total	4,512,961	100.0	5,228,966	100.0	

Source: TÜİK, 2024e.

While Ankara's total population grew by about 16% – from 4.5 million to 5.2 million – the number of people with *Primary School or Lower* education decreased by approximately 230,000. Similarly, those with *Primary Education* dropped by more than 460,000, a reduction to nearly one-third of the 2012 figure. A pivotal shift occurred in 2019 with a sudden 36% decline in the *Primary Education* population, which significantly influenced the suicide rates for that year (Table 4).

At the same time, the population with *Middle School or Equivalent* education increased by over 500,000, and those with *High School or Equivalent* education grew by about 300,000. The most notable increase was among those with *Higher Education*, whose numbers surged from approximately 755,000 in 2012 to 1.4 million in 2022—a rise of over 85% (Table 4).

It is therefore essential, when examining suicide rates by educational level in Ankara during the 2012–2022 period, to consider such substantial demographic shifts in educational attainment. Since male suicides have consistently been the primary driver of total suicide rates, this analysis also considers gender differences at this level.

Male Suicide Rates by Educational Attainment: In Ankara, between 2012 and 2022, the lowest crude suicide rate among males was observed in the *Primary School or Lower* category. This category includes individuals who are illiterate, have no formal education, or have completed primary school. Since the majority of individuals in this group have completed primary school, these categories were combined under a single level for analysis.

Although the total male population in this category did not experience significant changes during the period, there was a noticeable decline in the number of suicides. In 2012, 44 males in this group ended their lives, a figure that dropped to 13 by 2017, before rising again to 28 in 2022.

These patterns suggest a general decline in the crude suicide rate among males with *Primary School or Lower* education over the years.

When analyzing the crude suicide rate among males with *Primary Education*, a significant increase is observed between 2012 and 2022. The average rate for this group was approximately 8.34 per 100,000 from 2012 to 2018. However, in 2019, the rate more than doubled compared to the previous year, reaching 19.28 per 100,000. In subsequent years, the rates declined slightly but remained elevated, being at 17.93 in 2020, 15.57 in 2021, and 15.84 in 2022 (Figure 15).

This sharp increase in 2019 resulted from a simultaneous steep decline in the population at this education level and a rise in the number of suicides, meaning that the population change had a greater impact. In 2012, the population in this group was approximately 390,000, with 60 male suicides recorded, resulting in a crude suicide rate of 7.68 per 100,000 (based on mid-year population estimates). By 2019, the population had decreased to about 190,000, while 37 male suicides were recorded, producing a crude suicide rate of 19.28 per 100,000 (Figure 15).

If there had been 60 suicides in 2019, as in 2012, the crude suicide rate would have been approximately 31.5

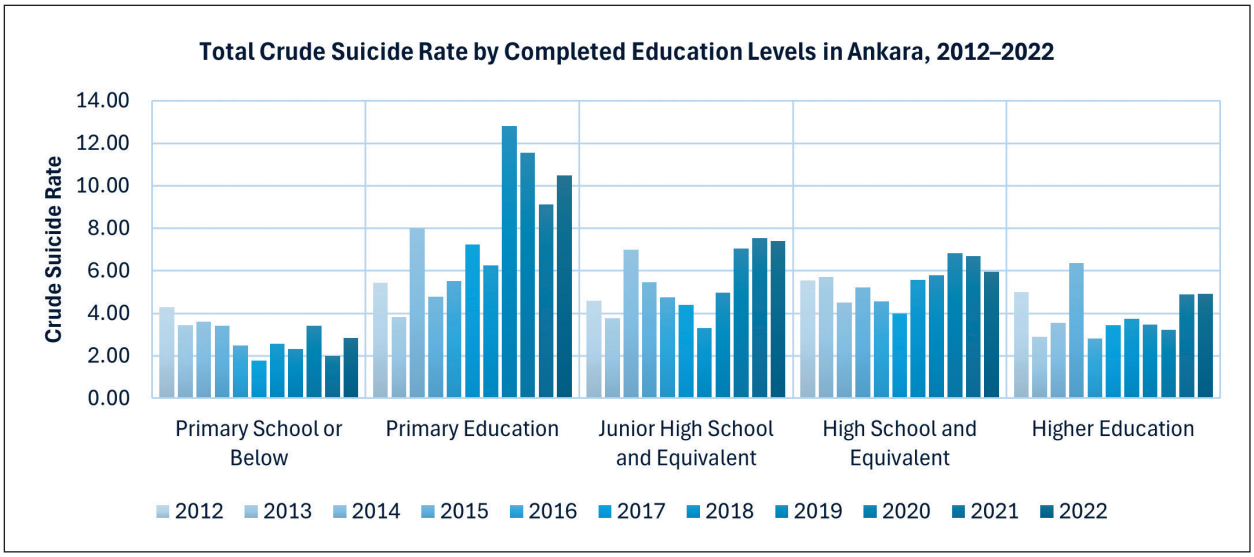

Figure 15. Total crude suicide rate by completed educational levels in Ankara, 2012-2022.
Source: TÜİK, 2024f.

per 100,000—well above the actual figure of 19.28. Conversely, if the 2012 rate of 7.68 per 100,000 had been maintained in 2019, the expected number of suicides would have been around 15. Instead, the actual number was 37. These figures highlight the combined effects of population decline and increased suicides in driving the sharp rise in the crude suicide rate for this group.

At the Middle School or Equivalent education level, there was a significant population increase over the years. However, the rise in crude suicide rates among males since 2019 is particularly striking. The highest rate in this group was recorded in 2022, reaching 11.41 per 100,000. Notably, both the Primary Education and Middle School or Equivalent levels experienced a sudden spike in male suicide rates in 2014.

At the High School or Equivalent education level, the population grew by approximately 30% between 2012 and 2022. Male suicide rates in this group peaked in 2020 and 2021, with rates of 10.44 and 10.36 per 100,000, respectively. Earlier rates, such as 8.33 per 100,000 in 2012 and 9.17 per 100,000 in 2013, are also notable. Furthermore, from 2018 to 2022, suicide rates among males at this level of education were consistently higher compared to earlier years (Figure 16).

A notable change was observed at the Higher Education level during the study period. The expansion of universities, programs, and enrollment capacities in Türkiye, contributed to a substantial increase in levels of higher education. In Ankara, the number of individuals with higher education rose from approximately 755,000 in 2012 to about 1.4 million in 2022, marking an increase of nearly 85%.

Between 2012 and 2022, the average crude suicide rate among males with higher education was the second lowest, following the Primary School or Lower category. Alongside the population growth, a corresponding rise in the number of suicides was observed in this group. In 2021 and 2022, 52 males ended their lives each year, with crude suicide rates of 7.60 and 7.28 per 100,000, respectively. In 2015, a comparable number of suicides (49) occurred, but the crude suicide rate that year was higher at 9.44 per 100,000 due to the smaller population size. In 2012, the rate was 7.32 per 100,000, with 30 recorded suicides. In all other years, the crude suicide rate remained relatively stable, hovering around 5 per 100,000 (Figure 16).

Female Suicide Rates by Educational Attainment: An analysis of female suicide rates in Ankara between 2012 and 2022 by educational attainment reveals patterns similar to those observed among males, with some distinct spikes in certain years.

The lowest crude suicide rates among females were observed in the Primary School or Lower category. In this

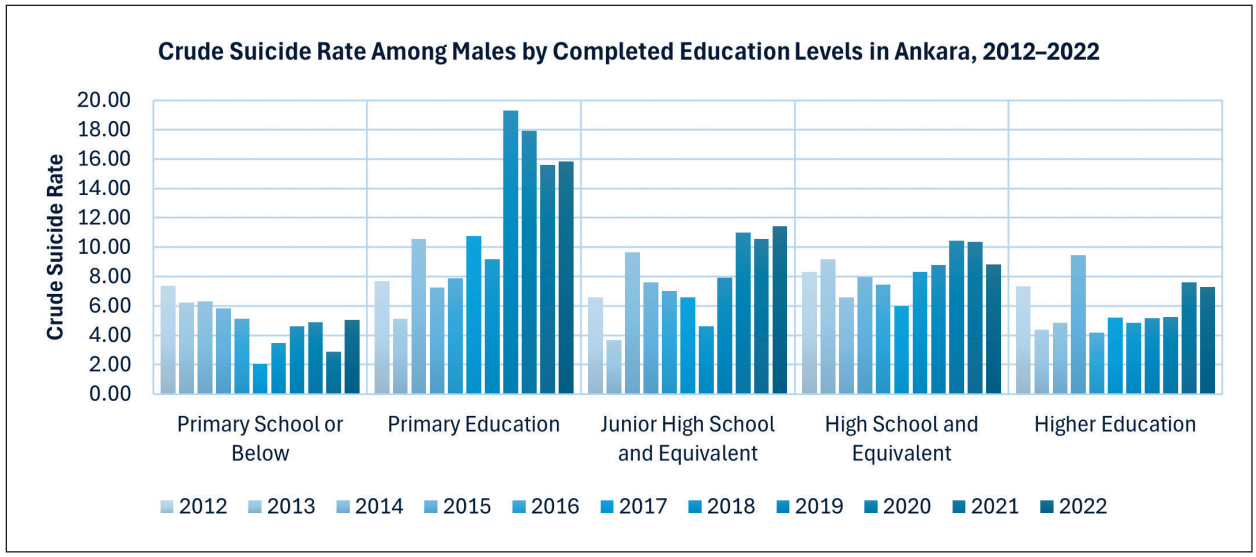

Figure 16. Crude suicide rate among males by completed education levels in Ankara, 2012-2022.
Source: TÜİK, 2024f.

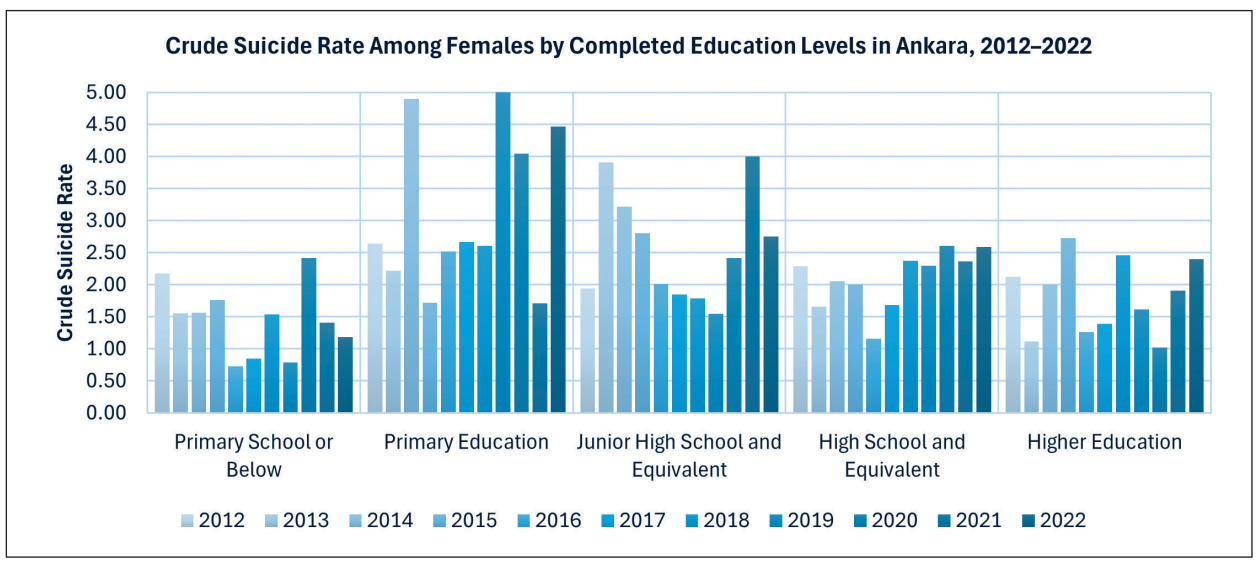

Figure 17. Crude suicide rate among females by completed education levels in Ankara, 2012-2022.
Source: TÜİK, 2024f.

group, rates generally remained below 2 per 100,000 and often below 1 per 100,000. The rate only exceeded 2 per 100,000 in 2012 (2.17) and 2020 (2.42).

Sudden population changes in the Primary Education category also influenced female suicide rates. In 2019, the rate rose sharply to 5.01 per 100,000, declined to 4.04 in 2020, but then increased again to 4.47 in 2022. A significant spike occurred in 2014 when the rate reached 4.90 per 100,000. Among females, the highest average crude suicide rate during the 2012–2022 period was at the Primary Education level, with a rate of 3.14 per 100,000 (Figure 17).

At the Middle School or Equivalent education level, the average crude suicide rate among females between 2012 and 2022 was 2.57 per 100,000, the second highest among education levels. Significant spikes occurred in

2013 (3.91) and 2014 (3.22), as well as in 2021, when the rate rose to 4 per 100,000. In other years, the rate hovered around, or slightly above, 2 per 100,000 (Figure 17).

For the High School or Equivalent education level, the crude suicide rate among females was relatively low. The highest rates were observed in 2020 (2.61) and 2022 (2.59) per 100,000.

At the Higher Education level, the average crude suicide rate for females was the second lowest after the Primary School or Lower category, reflecting a pattern similar to that of males. Notable spikes in this group were recorded in 2015, 2018, and 2022.

In conclusion, an analysis of crude suicide rates in Ankara between 2012 and 2022 by education level and gender reveals several significant findings. First, suicide rates among individuals with lower education levels are increasing for both genders. While the rapid transition of individuals from lower to higher education levels may partially explain this trend, the expected decline in suicides due to the shrinking population at lower education levels has not materialized; in some instances, suicides have actually increased.

There are two possible causes for this situation. The first posits a reverse correlation, suggesting that higher education levels are associated with lower suicide tendencies. While there is some validity in this explanation, it obscures another critical dimension: as levels of education rise, those remaining at lower education levels may face deteriorating living conditions and heightened stress, potentially driving them toward suicide.

The second perspective, consistent with other observations in this study, highlights the fact that suicide tendencies differ across education levels during periods of societal crisis. Suicides are also more prevalent among males and females with lower education levels, underscoring the disproportionate vulnerability of this group to social and economic pressures.

Crude Suicide Rates in Ankara by Marital Status and Gender (2012–2022): This section examines crude suicide rates in Ankara between 2012 and 2022 based on marital status and gender. Before proceeding with the analysis, the population structure in Ankara with respect to marital status will be outlined for context.

Throughout the period, the majority of the population consisted of married individuals. The proportion of married people in the total population in Ankara decreased from 65% in 2012, and to 61% in 2022. In contrast, the proportion who had never married increased only slightly from 26% in 2012, to 28% in 2022. The smallest segments of the population were widowed and divorced individuals, collectively accounting for approximately 10% of the total population across the whole period. Within this group, the proportion of divorced individuals rose from 4% in 2012 to 6% in 2022.

Gender differences within marital status categories are noteworthy. While the overall population is roughly balanced between males and females, this balance shifts in categories other than the married group. Among those who had never married, males consistently comprised over 55% of the group. Widowed individuals were overwhelmingly female, with women making up more than 87% of this category over the whole period. Similarly, women accounted for approximately 60% of divorced individuals.

These demographic dynamics must be considered when analyzing suicide rates and numbers as they provide essential context for understanding variations due to marital status and gender.

Between 2012 and 2022, the highest crude suicide rates in Ankara, regardless of gender, were observed among divorced and widowed individuals, followed by those who had never married. The lowest rates were consistently recorded among married individuals. However, significant gender differences were evident within each marital status category (Figure 18).

Among married men, the average crude suicide rate was 6.42 per 100,000, peaking at 8.26 per 100,000 in 2020. For men who had never married, the average rate was higher, at 10.03 per 100,000, with a peak of 12.42 per 100,000 in 2021. In this group, the rate exceeded 11 per 100,000 in 2012, 2013, 2019, 2021, and 2022 (Figure 19).

Widowed men had an average crude suicide rate of 20.61 per 100,000. However, due to the small population size of widowed men and low suicide counts in this group, the rate was not calculable in some years and showed significant fluctuations in others. Notably, the rates reached 35.50 per 100,000 in 2013, and 29.33 per 100,000 in 2015, both far exceeding the average (Figure 19).

Divorced men had the highest average crude suicide rate at 22.06 per 100,000. The peak rate in this category was

observed in 2014 at 29.73 per 100,000. A marked increase occurred in 2020, and in subsequent years, and the rate remained consistently above 25 per 100,000 (Figure 19).

During this period, the average crude suicide rate among married women was at an exceptionally low level of 1.54 per 100,000, and the rate never exceeded 2 per 100,000. For women who had never married, the average rate was higher at 3.18 per 100,000. The highest rate in this category of 4.63 per 100,000 was recorded in 2014, followed by another significant spike in 2019 at 4.19 per 100,000 (Figure 19).

Among widowed women, the average crude suicide rate was 2.85 per 100,000. The highest rates were observed in 2015 (4.63 per 100,000), 2012 (4.26 per 100,000), and 2020 (4.21 per 100,000). Despite widowed women making up a substantial share of the population, the number of suicides in this category was very low, leading to instances where rates could not be calculated. The stark contrast between the average suicide rate of widowed men (20.61 per 100,000) and widowed women (2.85 per 100,000) is particularly striking (Figure 20).

Among divorced women, the average crude suicide rate was 6.05 per 100,000, the highest among female marital status categories. The peak rate of 9.03 per 100,000 occurred in 2022. Except for sharp declines in 2016 (3.41 per 100,000) and 2019 (3.02 per 100,000), suicide rates among divorced women remained consistently high compared to the overall crude suicide rate for women (Figure 20).

Durkheim's Perspective on Suicide and Social Bonds: Durkheim, in his seminal work *Suicide*, argues that social bonds protect individuals from suicide, using data to demonstrate that suicide rates are lowest among married individuals. In the societies he studied, the highest suicide rates were observed among divorced individuals, whose social ties had been severed. This group was followed by widowed individuals and then by those who had never married. According to Durkheim, marriage represents the highest form of social integration, as the responsibilities and social interactions it entails make individuals less likely to take their own lives.

In the case of divorce, however, this social structure undergoes a sudden dissolution, creating an anomic state at the individual level, which results in the highest suicide rates being observed among divorced individuals. Durkheim emphasizes that this effect is particularly pronounced for men compared to women. A similar dynamic applies to widowed individuals, but since the death of a spouse is a natural event, rather than a societal or personal failure, and familial roles, such as caregiving, are often ongoing, suicide rates among widowed individuals are lower than those among divorced individuals.

Individuals who are single or have never married, on the other hand, have not yet formed the social bonds associated with family life, making their suicide rates higher than those of married individuals. To illustrate this concept, Durkheim introduces the idea of a "protection coefficient," which quantifies the extent to which marriage reduces the suicide rate compared to other marital statuses. Namely, this measure indicates the level of an individual's social integration; the stronger the individual's social ties, the more they are protected by society, and the lower their risk of suicide.

A similar calculation of the protection coefficient for Ankara province during the 2012–2022 period is presented in the Table 5.

In Durkheim's terms, marriage consistently demonstrates a strong preservative effect against suicide across the entire period. When taking the average for the 2012–2022 period, marriage shows the highest coefficient of preservation at 3.15, particularly in comparison to divorced individuals. When analyzed by gender, the highest coefficient of preservation for marriage is observed among divorced women (3.92), followed by divorced men (3.55). For those who have never married, the coefficient of preservation of marriage is higher for women than for men (Table 5).

The situation differs for widowed individuals. Men appear to be the most likely to commit suicide due to the death of their spouse, with a coefficient of preservation of 3.41. Additionally, those who have never married are shown to be less prone to a commit suicide compared to divorced individuals, with coefficients of preservation exceeding 2 for both women and men. Therefore, while marriage appears protective against suicide, the significant increase in suicide rates following divorce suggests that remaining unmarried may, in some cases, offer greater preservation (Table 5).

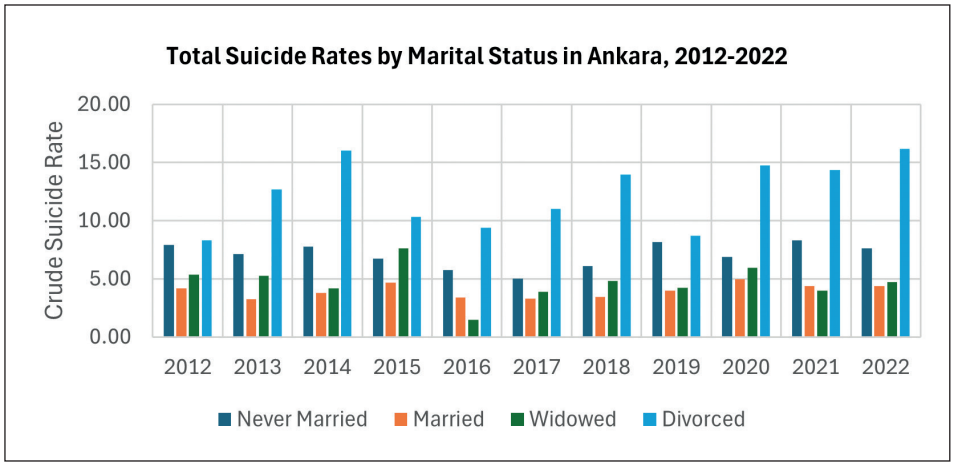

Figure 18. Total suicide rates by marital status in Ankara, 2012-2022.
Source: TÜİK, 2024g.

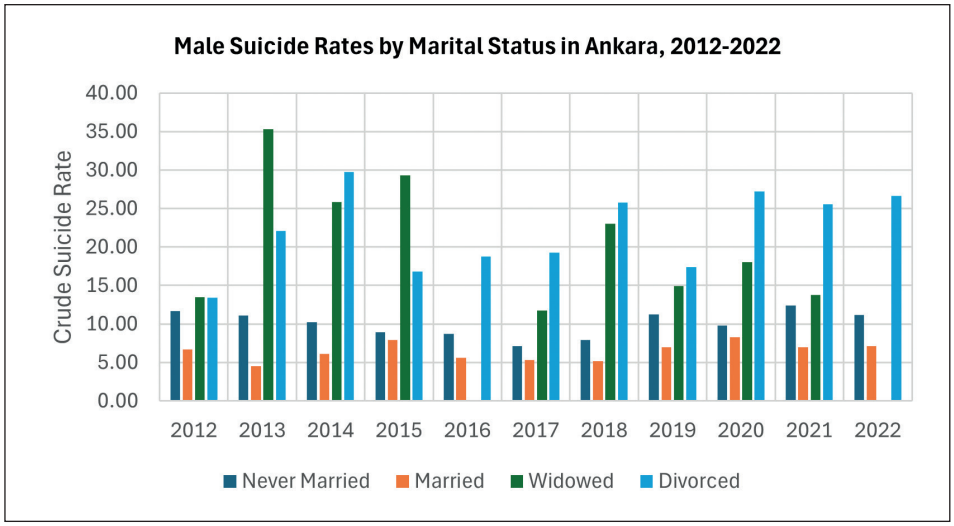

Figure 19. Male suicide rates by marital status in Ankara 2012-2022.
Source: TÜİK, 2024g.

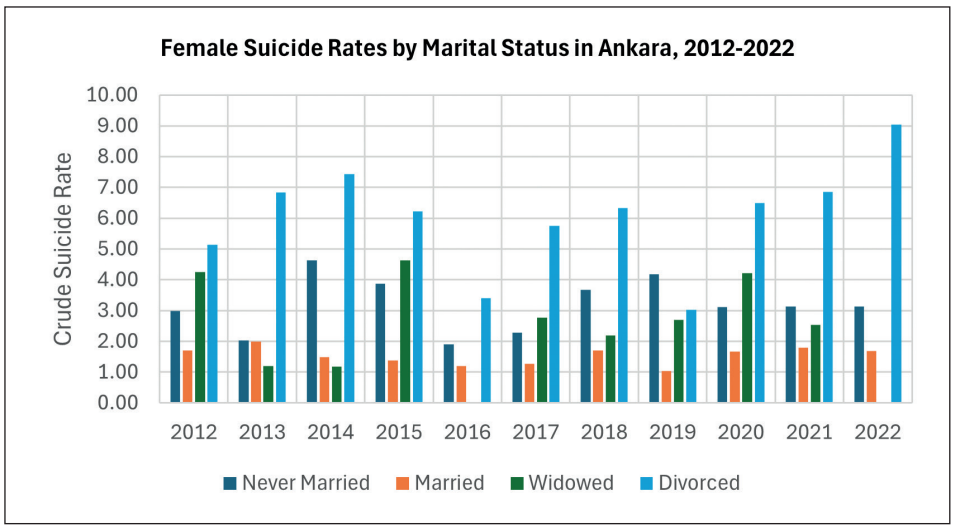

Figure 20. Female suicide rates by marital status in Ankara, 2012-2022.
Source: TÜİK, 2024g.

Table 5. *Coefficient of Preservation by Gender, 2012-2022*

		Married			Never Married
Year	Gender	Never Married	Divorced	Widowed	Divorced
2022	*Total*	1.73	3.69	1.08	2.13
	Male	1.58	3.75	c	2.38
	Female	1.86	5.36	c	2.89
2021	*Total*	1.90	3.28	0.91	1.73
	Male	1.78	3.66	1.98	2.06
	Female	1.75	3.83	1.42	2.19
2020	*Total*	1.38	2.97	1.20	2.15
	Male	1.19	3.30	2.18	2.78
	Female	1.86	3.87	2.51	2.08
2019	*Total*	2.05	2.18	1.07	1.07
	Male	1.62	2.50	2.15	1.54
	Female	4.07	2.94	2.62	0.72
2018	*Total*	1.76	4.05	1.39	2.30
	Male	1.53	4.96	4.43	3.25
	Female	2.16	3.73	1.29	1.73
2017	*Total*	1.53	3.36	1.19	2.20
	Male	1.35	3.64	2.23	2.70
	Female	1.81	4.55	2.20	2.51
2016	*Total*	1.69	2.76	0.44	1.63
	Male	1.56	3.35	c	2.15
	Female	1.58	2.83	c	1.79
2015	*Total*	1.45	2.22	1.64	1.53
	Male	1.13	2.13	3.71	1.88
	Female	2.81	4.50	3.36	1.60
2014	*Total*	2.05	4.22	1.09	2.06
	Male	1.67	4.87	4.23	2.92
	Female	3.12	5.01	0.79	1.61
2013	*Total*	2.19	3.89	1.62	1.77
	Male	2.44	4.87	7.79	1.99
	Female	1.02	3.44	0.60	3.37
2012	*Total*	1.89	1.97	1.28	1.04
	Male	1.75	2.00	2.02	1.15
	Female	1.76	3.03	2.51	1.72
Average of 2012-2022	*Total*	1.78	3.15	1.17	1.78
	Male	1.60	3.55	3.41	2.25
	Female	2.16	3.92	1.92	2.02

Furthermore, as noted earlier, factors such as level of education, age, residential district, and societal crises in different years significantly influence suicide trends, contributing to varied patterns across specific years. For instance, in 2022, marriage had a notably high coefficient of preservation of 5.36 for women, when compared to divorced individuals. For men, marriage demonstrated an exceptionally high coefficient of preservation of 7.79 in 2013, compared to widowed individuals (Table 5).

Trends in Suicide Causes: Ankara and Türkiye (2000–2022): Analyzing the causes of suicide, as outlined earlier, involves several challenges. These include the lack of direct data, reliance on secondary sources, and limitations in the design and use of suicide registration forms. Consequently, rather than aiming to comprehensively address individual causes of suicide, the primary objective of this study is to explore the broader societal factors underlying suicide.

To emphasize the significance of gaps in recorded suicide data, a notable trend will be used as an illustrative example.

The tables below present a comparison of the total number of suicides, by cause, in Ankara and Türkiye between 2000 and 2022. For clarity and ease of interpretation, the data has been grouped into three categories:

Group 1: Illness, Family Incompatibility, and Economic Problems

Group 2: Business Failure, Emotional Relationship, Not Marrying the Desired Person, and Educational Failure

Group 3: Other and Unknown Causes

From 2000 to 2022, a declining trend is evident in suicides categorized under Family Incompatibility and Economic Problems in both Türkiye and Ankara. Although occasional increases are observed, these categories have not consistently emerged as dominant causes over time (Figure B1 in Appendix B).

In contrast, suicides attributed to Illness have shown a significant increase, particularly since 2015. However, the specific types of suicides classified under Illness remain unclear, leaving the definition and scope of this category ambiguous.

Between 2000 and 2022, suicides categorized under Business Failure, Emotional Relationship, Not Marrying The Desired Person, and Educational Failure show a declining trend in both Türkiye and Ankara. In particular, Educational Failure and Business Failure appear to be no longer prominent causes of suicide (Figure B2 in Appendix B).

However, in the category of Emotional Relationship and Not Marrying the Desired Person, while a decrease was observed until 2015, a significant increase occurred in the years that followed.

Finally, a notable shift is observed between the Other and Unknown categories starting in 2015. Until 2016, the Other category remained at very low levels, but subsequently replaced the Unknown category as the more frequently used classification (Figure B3 in Appendix B).

When considered alongside the increase in the Illness category, this shift suggests a potential change or inconsistency in how institutions have categorized the reasons for suicide since 2015. This raises the question of whether new types of suicides have emerged that do not fit within the existing classification framework.

Seasonal and Monthly Trends in Suicide Rates: An Analysis for Ankara (2012–2022): Between 2012 and 2022, the average number of suicides in Ankara, analyzed by month and season, shows distinct patterns. The highest monthly averages occurred in May and July, while the seasonal average peaked in spring. Conversely, the lowest averages were recorded in December and February, with winter having the lowest seasonal average (Table A2 in Appendix A).

These trends, however, vary in certain years. For instance, in 2015, the highest number of suicides occurred in January and March, while in 2014, the peaks were in June and July. Similarly, in 2018, the highest numbers were observed in September and November (Table A2 in Appendix A).

The Perspectives of Professional Experts on Suicides in Ankara[6]

Interview with the Police: On April 26, 2024, we conducted a two-hour face-to-face interview with two police

6 Since only one expert was interviewed from each district, the district names have not been disclosed to protect the anonymity of the individuals.

officers. One of the officers had over 25 years of experience, including the past eight years in the Homicide Bureau, while the other was a younger officer who assisted him during the interview. The interview was held in an interrogation room of the Homicide Bureau and focused on the general operations, reporting processes, and field experiences related to suicide cases. The role of police officers in this area, deficiencies in reporting systems, and potential improvements for integrating social services were discussed. One suggestion that arose from the interview was that more suicides could be prevented if more attention was paid to signals given by individuals during the three days before their suicide.

Another issue raised in the interview was the perceived inadequacy of the categories used in reporting the causes of suicide, particularly the ambiguity of the categories: "Family Incompatibility," "Economic Problems," and "Other". In addition to the ambiguity of these categories, the police officer pointed out that these categories often overlap. The example of a suicide resulting from disputes over wedding gifts was given. Such a case could be marked solely as due to "Family Incompatibility" but it also contains economic, cultural, and psychological subtexts. Similarly, in the "Economic Problems" category, a case of a civil servant who committed suicide over a debt of 60,000 TL was mentioned, which raises the need for broader contextual consideration based on individual living standards. The wide scope of the "Other" category and the challenge of fitting diverse cases into it, such as hallucinations, sect pressure, or blackmail, were also highlighted. All of these examples clearly demonstrate how the categories used often do not fully reflect the actual causes. The interview therefore concluded that it would be beneficial to revise the police form and update the categories. Although no concrete suggestions were raised regarding what subcategories should be included or how they should be updated, awareness of how the shortcomings impact reporting was expressed.

Interview with the ASHB: On April 22, 2024, we conducted a face-to-face preliminary interview lasting approximately one and a half hours at the Ankara Provincial Directorate of the Ministry of Family and Social Services (ASHB). Participants included a psychologist from the Social Service Center of a central district of Ankara, a teacher from the Family and Community Service Unit, and an Ankara Provincial Directorate branch manager. The interviewees discussed the role of social services in suicide cases, current problems, and proposals for solutions. The conversation focused on suicides involving young people, women, and children, while noting that single adult men fell outside the scope of these services. Criticism was directed at the insufficiency of inter-institutional coordination, the absence of a clear legal definition of suicide, and the tendency to base support processes on individual experiences. Participants also noted their opinions on the recent increases in suicides due to economic crises, concerns about the future, and exposure through social media.

Additionally, participants said that suicide attempts were often recorded as accidents or covered up. For example, legal proceedings may be required for individuals under the age of 18, which can lead to family members or relatives being reluctant to report cases. Similarly, participant underlined how suicide attempts by women may be covered up due to the woman feeling ashamed and being afraid of stigmatization from their social circle. Interviewees suggested the development of a standard report template and the inclusion of experienced personnel from different districts in focus group studies. The participating psychologist highlighted the taboos surrounding suicide and the inadequacies of the mental support processes.

Focus Group Discussion Findings: On September 20, 2024, we held a focus group meeting at the Ankara Provincial Directorate of ASHB. The meeting included expert psychologists from eight different districts affiliated with Social Service Centers (SHM) in Ankara. The meeting discussed the causes of suicide cases, risk groups, the roles of family and education, measures and processes against suicides, and policy suggestions. The questionnaire for the focus group discussion was arranged in line with the following themes: (a) observed causes of suicide attempts, (b) risk groups for suicide, (c) the role of education, family, and the environment, (d) measures taken, support, and treatment processes and (e) further comments and highlights.

Participants emphasized (a) the leading causes of suicide attempts or cases brought to their attention, such as economic difficulties, substance abuse, domestic violence, conflicts in close relationships, and issues of honor. According to one participant, financial reasons were significant causes among men, along with relationship issues, such as infidelity. An example was shared of a man who

attempted suicide after being cheated on by his wife. It was noted by one of the experts that two individuals diagnosed with schizophrenia, and who were struggling with substance abuse, jumped off a building, one being killed immediately and the other passing away shortly after. In one of the districts, a woman committed suicide after her spouse abandoned her following a second marriage attempt. The trauma experienced by her children who witnessed this event was also highlighted in the discussion.

These examples demonstrate the close connection between suicides and disruptions in personal relationships or economic difficulties. Considering that only nine of the suicides in Ankara in 2022 were attributed to "Emotional Relationship and Not Marrying the Desired Person", it is evident that while many cases may fall within the scope of Social Services Centers, a significant portion does not.

Participants stated that (b) certain risk groups stand out among individuals who have attempted suicide. These include unemployed young graduates, individuals experiencing financial difficulties, those with psychiatric disorders, individuals living alone, people displaced by earthquakes, and adolescents. For instance, one of the experts mentioned a 19-year-old girl who attempted suicide due to family and marital conflicts caused by a forced marriage. It was noted also that children from fragmented families, or those subjected to abuse, may attempt suicide.

The discussions about risk groups show that participants identified unfavorable socioeconomic conditions, family pressure, abuse, and psychological disorders as driving factors for suicide. The findings from this part of the discussion highlight the importance of individuals being able access to social relationship networks to ensure social integration. Individuals who are more likely to experience social exclusion are often perceived as being a suicide risk. In other words, individuals with weaker social networks (e.g., those who have migrated after disasters or those living alone) may find it more challenging to maintain healthy relationships within society. When such social features coexist with psychological/ psychiatric disorders, the likelihood of suicidal tendencies increases. Emile Durkheim (1999/1897) stated that when societal influences on individuals weaken, individuals feel more withdrawn and isolated, becoming more inclined to end their lives. Durkheim categorized such suicides as "egoistic" suicides.

The importance of examining the profile of young men in Türkiye as a significant aspect of suicide risk groups was also emphasized. Although it is globally recognized that young men are more prone to suicide, their predisposition to destructive behaviors such as criminal activities and suicide should also be considered. The presence of a group experiencing a "crisis of masculinity" may warrant further research. Topbaş (2024) points to indicators that link suicide to a crisis of masculinity, including "a lack of life goals, withdrawal from the workforce, social isolation, high dependency on video games and pornography, suicide, drug overdose, less interaction with women, lower sexual activity, fewer marriages, and fewer children" (p.10-11). It is suggested that there is a need to further investigate the sociological context of this typology of masculinity crises.

Participants highlighted (c) the role of family and education as a critical factor, especially among young individuals. According to their observations, suicide attempts among adolescents and young adults are on the rise, and are often linked to inadequate problem-solving skills in parent-adolescent relationships. Such suicide attempts are considered prevalent among adolescents by all the participants. One of the experts underlined that young individuals sometimes view suicide as a means to solve problems. The same participant highlighted that families are often unaware of problematic issues, and may only intervene after a second suicide attempt. Among the examples shared was a young female university graduate in a central district who expressed her intention to commit suicide due to unemployment and financial difficulties.

Our contemporary social structure and relationships are changing rapidly due to historical dynamics that are both influenced by global events and are unique to our country. One significant reflection of this process is the differentiation in life trajectories and lifestyles between generations. For example, today, young women and men, particularly those living in urban areas, often envision a life that includes higher education and entry into the workforce after graduation. Consequently, searching for suitable partners takes longer than it used to for both women and men, resulting in later marriages. Finally, the prominence of digitalization and how lifestyles are affected are also noteworthy.

Such significant shifts in life trajectories and lifestyles may lead to reduced interaction and, at times, poorer

communication between young people and their parents. These periods of social change can be seen as sensitive transitional phases, requiring both adaptation to change and the continuation of social cohesion. Enabling families and young individuals to experience these transitions both together and inclusively is critical. Young people in families struggling with such transitions face more significant psychosocial challenges, often leading to destructive behaviors directed toward themselves or others. Suicide attempts are among such destructive behaviors. These attempts might emerge as messages to parents, or to members of close social circles, and can become manipulative when perceived as being effective.

The participants of the focus group participants emphasized the need for healthy and adequately managed relationships between young people and their parents. They suggested preventive support services for families to manage these relationships effectively. These suggestions included raising parental awareness about adolescence, and introducing problem-solving approaches to address issues between young people and their parents.

The notion of "strategic suicide", which refers to a declared intent to die by suicide, or deliberate but unsuccessful suicide attempts employed as a means of communication, emerged frequently in focus group discussions. Experts identified two primary motivations behind these acts: seeking acknowledgement from institutional systems, or seeking acknowledgment from close social circles.[7] Examples of strategic suicides are summarized in the Table 6 below.

The findings from the focus group discussions indicate that seeking attention from the system is often related to requests for financial assistance or efforts to expedite bureaucratic processes. For instance, one of the participants described an individual threatening suicide to hasten the resolution of a custody dispute.

Regarding the goal of gaining attention from close circles, examples included women subjected to domestic violence, individuals who lost financial support, and adolescents. One of the participants explained that "adolescents see suicide attempts as a way to solve problems. This makes families panic. […] They start threatening the family with suicide."

As a solution for addressing suicide risk among adolescents, participants proposed official education programs on adolescence and stress management starting, at the middle school level, for both boys and girls. Suicide, as categorized under "aggressive suicides" in the literature, includes the subcategory of "blackmail suicides" (Kalkandeler, 2020). The importance of addressing this issue early by developing and implementing educational mod-

Table 6. *Suicide Strategies by Objectives (Focus Group Discussion)*

Aim	Exemplifying cases
Seeking Acknowledgement from Institutional Systems	"We often hear people say, 'Do I need to commit suicide for someone to hear me?' This is common, from abused women to those whose financial support has been cut off."
Seeking Acknowledgement from Close Social Circles	"For instance, the suicide attempts of a 19-year-old girl in an unwanted marriage, whom neither her family nor her husband allowed her to get a divorce, were meant to say, 'Look, I'm in a bad situation.' Another young man, who was struggling with panic attacks, was unable to work, and his family didn't take his situation seriously. He attempted suicide and asked us to talk to his family, saying, 'They're not taking me seriously.' This is sometimes done to show how serious their situation is."

7 These categories are introduced here solely for analytical purposes, as they reflect recurring patterns in participants' accounts. By using the term "strategic," we refer to a discourse that some individuals are said to adopt, without making generalizations or suggesting any flaws in the system. Our aim is neither to infer individuals' inner motivations, nor to portray these narratives as representative of broader realities. Instead, they are presented here as thematically grouped perspectives, voiced by focus group participants, which warrant further academic inquiry and representative fieldwork.

ules can be better understood in this context. As generational misunderstandings also contribute to strategic suicides, developing and implementing parental education modules on adolescents was highlighted as a key policy recommendation.

Participants highlighted several issues in (d) intervention processes for suicide cases, particularly insufficient inter-institutional coordination. Deficiencies in psychiatric support and insufficient follow-up after referrals further complicate these processes. One of the representatives reported that social workers often rely on personal efforts to reach cases, and she expressed frustration over incomplete information provided for a case by saying:

When I get a suicide report from the hospital, it includes only the patient's name, address, phone number, method of suicide [e.g., jumping off of a building], and age range. Each hospital provides different information; sometimes, even the national ID number isn't included. At the very least, hospitals could provide family details, education level, and a short history in a few pages. It's not standardized at all. For instance, the woman I mentioned earlier had broken bones and was bedridden at home. I called to offer services, and she said, "If you're going to provide help here at home, fine".

This example also underscores the need for structured coordination between institutions to ensure effective intervention and follow-up processes for suicide cases. Another participant shared that an individual from a high socioeconomic background had used suicide threats to demand social assistance. While this case aligns with the risk groups mentioned earlier, it also highlights the challenges professionals face in distinguishing between genuine needs and other cases. Another instance involved navigating vague neighborhood details, requiring a taxi driver's help to locate the individual in need based on guessing the location. The participant explained that in that case, she did not have proper address information for the individual in need, only an image of the neighborhood. Such examples demonstrate the lack of a systematic approach to sharing case details, suggesting that intervention and follow-up processes for suicide cases need to be more organized and less dependent on individual efforts.

In terms of further comments and highlights (e), participants underlined issues such as weak inter-institutional coordination, particularly between psychiatric services and social services, and emphasized the importance of increasing awareness of suicide. Participants suggested developing educational programs for adolescents and parents, and stressed the need for a holistic perspective on preventive services for suicide. They noted that if individuals do not receive support from all relevant institutions and actors, the effectiveness of other measures is significantly reduced. The words of one of the participants summarize this concern:

Suicide requires a holistic approach. For example, if there is a problem within the family related to education, psychiatric follow-up will not work. Addressing the issue from just one angle is ineffective. When one side fails to take it seriously, the others might not either.

It was also pointed out that there are significant issues with substance abuse and drug trafficking in one of the districts. Individuals living in this region are heavily involved in suicide cases, and thus require more substantial interventions. Workers reported feeling unsafe while addressing cases in these areas, emphasizing the need for creating secure working conditions for social service professionals, especially when dealing with individuals involved in criminal activities or substance abuse.

Discussion

Quantitative and qualitative findings emphasize different aspects of the suicide cases in Ankara. Among these two groups of findings are overlapping or mutually related points that need to be considered. These points can be grouped as follows: (a) education and socioeconomic factors, (b) gender disparities, (c) the role of family, marriage and social integration, (d) age specific vulnerabilities, (e) institutional gaps, (f) strategic suicides, (g) district-specific suicide trends in Ankara, and finally (h) protective factors and necessity of holistic approaches. In the following discussion these themes, which can be found in both analytical parts of our study, will be compared and contrasted.

Starting with (a) education and socioeconomic factors, we see that both quantitative and qualitative findings emphasize the significant impact of socioeconomic conditions on suicide rates. Quantitative data reveals spikes in suicide rates during periods of economic crises, such as the 2001 economic downturn and the 2018 foreign exchange crisis, particularly among men. Qualitative insights complement this finding by highlighting individual cases, such as suicides linked to debt and financial

instability, which underscores the vulnerability of unemployed youth, low-income families, and those struggling with economic pressures. These findings illustrate how economic problems function as a pervasive risk factor, exacerbating stress and isolation, particularly for individuals with limited access to resources.

The quantitative findings show an inverse relationship between educational attainment and suicide rates, with lower-educated groups exhibiting higher rates. However, the qualitative data suggests a more complex narrative: individuals with lower levels of education often experience heightened socioeconomic pressures, such as limited job opportunities, financial instability, and social marginalization. These conditions create a sense of entrapment and hopelessness, increasing the risk of suicide. On the other hand, the rise in education levels among the population has not uniformly reduced suicide rates, as higher education may bring its own stressors, such as increased competition and higher expectations of success.

Gender disparities and suicide risk should be mentioned as a significant theme. It is evident that quantitative data consistently shows significantly higher male suicide rates compared to females, with the male-to-female ratio in Ankara peaking at 5:1 during certain years. Male suicides are concentrated in the 25–44 age group, which may be closely linked to societal expectations due to economic challenges. In line with the quantitative data, qualitative insights reveal that societal expectations exacerbate men's vulnerability during crises, such as economic downturns or job loss, as these challenges are often perceived as threats to their identity and social standing. Conversely, while female suicide rates are lower, women often attempt suicide more frequently, reflecting their use of non-fatal self-harm to express distress or seek help in situations of domestic conflict or emotional turmoil. Indeed, qualitative findings provide further depth by identifying a "crisis of masculinity," (Topbaş, 2024) characterized by unemployment, social isolation, and a perceived loss of traditional roles. Meanwhile, female suicides are frequently linked to domestic violence, family pressures, and relational conflicts. These gendered patterns suggest that prevention strategies must address the unique social and psychological pressures faced by each group.

Both groups of findings highlight the critical influence of family dynamics and social bonds. This brings the discussion to the third theme: the role of family, marriage, and social integration. Quantitative findings reveal that married individuals exhibit the lowest suicide rates, while divorced and widowed individuals, particularly men, face significantly higher risks. This aligns with how Durkheim's theory of social integration underscores the protective role of strong social ties. Qualitative insights reinforce this perspective, identifying family conflicts, generational communication gaps, and inadequate problem-solving skills within families as key contributors to suicidal behavior. Adolescents and young adults, in particular, often perceive suicide as a way to resolve family-related stress, emphasizing the need for family-focused intervention programs. It is noteworthy that the qualitative data highlight nuances within the categories of married, widowed, divorced, or never-married groups: for example, individuals in strained marriages, or those experiencing domestic violence, may still face elevated suicide risks, suggesting that the quality of social bonds is as important as their existence.

Quantitative data highlight age-specific vulnerabilities, with males aged 25–44 and females aged 15–24 showing sharp increases in suicide rates during societal crises. Older individuals also experience heightened risk, particularly during periods of social isolation, such as during the COVID-19 pandemic. Qualitative findings provide further context by identifying adolescents and unemployed young adults as high-risk groups, driven by family pressure, socioeconomic challenges, and societal transitions. The shared insights suggest that societal crises amplify existing vulnerabilities, necessitating targeted interventions tailored to different age groups. In older age groups (55+), both genders show increased suicide rates. However, the findings of the focus group discussions show that there are different insights regarding older age groups and suicide risk. On the one hand, some of the experts think that older age groups are more resilient to hardships due to their experiences obtained throughout the course of their life. On the other hand, most respondents attributed the group as being highly vulnerable to factors such as social isolation, declining health, and feelings of irrelevance or dependency within family structures.

Both discussions critique limitations in reporting and institutional coordination. Quantitative findings reveal ambiguities in suicide categorization, such as the broad use of "Other" and "Unknown" causes, which obscure

deeper insights into the drivers of suicide. Qualitative data corroborates this by identifying overlaps and inadequacies in categories such as "Family Incompatibility" and "Economic Problems." Additionally, social workers, police officers and psychologists report incomplete and inconsistent case details, further complicating intervention efforts. These gaps point to the urgent need for standardized reporting systems and enhanced inter-institutional coordination to improve data accuracy and intervention efficacy.

Another theme that is relevant in both groups of findings is strategic suicides. Qualitative findings introduce the concept of "strategic suicides," where individuals use suicidal behavior to seek attention from systems and close circles, or to find solutions to their problems that seem to be unsolvable for them. Quantitative trends, such as higher suicide rates among socially isolated individuals, align with this phenomenon, reflecting the role of unmet social and emotional needs, as well as feelings of despair due to isolation, in driving suicidal behavior. Addressing this requires early intervention programs that focus on improving communication and problem-solving skills, particularly for adolescents and young adults. It should also be highlighted that since suicide attempts and completed suicides are obviously different, both need meticulous study. Quantitative data focus primarily on completed suicides, but qualitative findings emphasize the importance of understanding suicide attempts, especially among women and younger populations, which are often calls for help rather than intentional efforts to end their lives. Such behaviors highlight the need for early intervention and accessible mental health services to address the root causes of distress before they escalate.

As physical and geographic conditions are just as influential on suicide cases as individuals' social and emotional needs, district-specific suicide trends in Ankara were also analyzed in this study. The trends mentioned reflect varying levels of urbanization, access to resources, and social cohesion. For example, districts like Çankaya show higher suicide rates, potentially related to a combination of urban stressors and social isolation. More affluent Çankaya may has higher visibility of mental health issues due to better reporting systems or greater stigma surrounding failure among educated and urbanized populations. Conversely, in districts with lower socioeconomic indicators, such as Mamak, economic hardship and family conflict appear to be more significant drivers, as reflected in the qualitative interviews. Additionally, cultural and social stigma in relation to the phenomenon of suicide might change across districts. Both quantitative and qualitative findings suggest that cultural stigma surrounding mental health and suicide affects reporting and intervention. In some districts, suicide might be underreported or misclassified due to societal taboos, while qualitative data reveals that individuals often avoid seeking help out of fear of judgment or ostracization. This stigma can exacerbate feelings of isolation and hopelessness, particularly among vulnerable groups in different districts.

Finally, both analyses emphasize the need for protective factors and holistic approaches. This theme underscores the protective role of strong social bonds, education, and family support. Quantitative data shows lower suicide rates among married individuals and those with higher education levels, suggesting that social integration and economic stability function as buffers against suicidal tendencies. Qualitative findings highlight the importance of fostering healthy family relationships and providing preventive support services, such as parental education and stress management programs. The findings show that a holistic approach that integrates education, family dynamics, and socioeconomic support, is essential to reduce suicide risk effectively.

Conclusion

This study has examined the patterns and dynamics of suicide in Ankara through both quantitative and qualitative approaches, revealing the multifaceted nature of this phenomenon. Suicide, as highlighted in the introduction, is a complex issue that intersects sociological, psychological, cultural, and systemic factors. Quantitative analysis has provided valuable insights into trends over the past decade, uncovering significant patterns related to gender, age, marital status, educational attainment, and regional disparities. Meanwhile, qualitative data from interviews and focus groups have enriched this analysis by exploring underlying causes, institutional responses, and the social contexts surrounding suicide cases.

Key findings demonstrate that socioeconomic difficulties, particularly economic crises and financial instability, are among the most significant drivers of suicide. The data also reveal stark gender disparities, with males exhibiting higher crude suicide rates, often influenced by a "crisis of masculinity" tied to unemployment and social

isolation. Females, while experiencing lower overall rates, are more likely to face pressures from domestic violence, family conflicts, and relational issues.

Both analyses underscore the protective role of family and social integration, consistent with Durkheim's theory of social regulation and integration. The study found that married individuals are at the lowest risk, while divorced and widowed individuals faced significantly higher rates. Additionally, younger and older populations emerged as particularly vulnerable during periods of societal crises, such as the COVID-19 pandemic.

From a methodological perspective, this study has highlighted significant limitations in suicide reporting and institutional responses. Ambiguities in categorization, inconsistent data collection, and insufficient inter-institutional coordination, hinder effective prevention and intervention. Qualitative findings emphasize the need for standardized reporting templates and stronger coordination between social services, psychiatric institutions, and law enforcement.

As noted in the introduction, suicide is not merely a personal act, but a multidimensional phenomenon influenced by broader societal, cultural, and historical contexts. This study adopts the broader WHO definition of suicide, while also exploring related behaviors such as suicidal ideation and attempts. The findings illustrate the importance of integrating sociological perspectives into the study of suicide, addressing its societal dimensions alongside individual psychological factors.

This study contributes to the literature by providing one of the first in-depth analyses of suicide in Ankara that combines quantitative trends with qualitative insights to highlight the interplay of social, economic, and institutional factors. By focusing on a specific provincial context, the study offers a nuanced interpretation of regional suicide dynamics, thus filling a critical gap in existing national and global studies.

In conclusion, addressing suicide in Ankara requires systemic reforms and holistic approaches that combine economic support, mental health services, family interventions, and improved institutional coordination. By bridging quantitative trends with qualitative insights, this study offers a comprehensive understanding of the dynamics of suicide, and highlights critical areas for future research and policy development.

Ethics Committee Approval

This study was approved by the Social Sciences and Humanities Research and Scientific Publication Ethics Committee of the Social Sciences University of Ankara (Date: 03.06.2024, Issue Number: 118092).

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Appendix A

Table A1. *Crude Suicide Rate (per 100,000) by Statistical Regions 2001 & 2023*

Place of Event (NUTS-2)	Year		Percentage Change
	2001	2023	
TR Türkiye	3.97	4.76	20%
TR1 İstanbul	4.09	3.57	-13%
TR2 West Marmara	4.03	6.57	63%
TR21 (Tekirdağ, Edirne, Kırklareli)	4.14	6.27	52%
TR22 (Balıkesir, Çanakkale)	3.93	6.88	75%
TR3 Aegean	5.52	5.98	8%
TR31-TR310 İzmir	6.72	5.61	-16%
TR32 (Aydın, Denizli, Muğla)	7.47	6.94	-7%
TR33 (Manisa, Afyonkarahisar, Kütahya, Uşak)	2.49	5.51	121%
TR4 East Marmara	3.81	4.03	6%
TR41 (Bursa, Eskişehir, Bilecik)	4.82	4.30	-11%
TR42 (Kocaeli, Sakarya, Düzce, Bolu, Yalova)	2.66	3.75	41%
TR5 West Anatolia	4.79	5.34	12%
TR51-TR510 Ankara	5.78	5.06	-12%
TR52 (Konya, Karaman)	2.91	5.99	106%
TR6 Mediterranean	3.70	5.40	46%
TR61 (Antalya, Isparta, Burdur)	4.34	5.91	36%
TR62 (Adana, Mersin)	3.16	6.50	106%
TR63 (Hatay, Kahramanmaraş, Osmaniye)	3.89	3.46	-11%
TR7 Central Anatolia	3.11	6.00	93%
TR71 (Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir)	2.88	5.65	96%
TR72 (Kayseri, Sivas, Yozgat)	3.26	6.23	91%
TR8 West Black Sea	3.78	4.85	28%
TR81 (Zonguldak, Karabük, Bartın)	4.25	4.77	12%
TR82 (Kastamonu, Çankırı, Sinop)	4.05	4.94	22%
TR83 (Samsun, Tokat, Çorum, Amasya	3.55	4.86	37%
TR9 East Black Sea	2.34	3.69	57%
TR90 (Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane)	2.34	3.69	57%
TRA Northeast Anatolia	2.83	4.72	67%
TRA1 (Erzurum, Erzincan, Bayburt)	1.57	4.09	161%
TRA2 (Ağrı, Kars, Iğdır, Ardahan)	4.03	5.34	33%
TRB Centraleast Anatolia	3.90	4.55	17%
TRB1 (Malatya, Elazığ, Bingöl, Tunceli)	4.57	3.61	-21%
TRB2 (Van, Muş, Bitlis, Hakkari)	3.35	5.31	58%
TRC Southeast Anatolia	2.94	3.83	30%
TRC1 (Gaziantep, Adıyaman, Kilis)	3.46	3.72	7%
TRC2 (Şanlıurfa, Diyarbakır)	2.92	4.15	42%
TRC3 (Mardin, Batman, Şırnak, Siirt)	2.38	3.42	44%

Source: TÜİK, 2024a.

Table A2. *Suicides by Month in Ankara Province, 2012-2023*

Year	Total	Jan	Feb	Mar	Apt	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2012	220	18	18	17	13	26	21	17	13	20	23	15	19
2013	196	14	9	12	20	23	21	17	14	22	18	11	15
2014	219	17	14	23	28	27	32	40	6	10	8	8	6
2015	227	28	16	32	25	21	18	11	21	13	15	17	10
2016	173	12	18	16	8	14	12	14	22	15	19	10	13
2017	173	17	13	8	12	26	12	16	13	14	13	17	12
2018	200	17	12	14	17	21	15	16	14	24	14	24	12
2019	229	20	10	26	23	15	22	24	19	22	19	19	10
2020	263	17	21	27	18	19	17	28	19	23	29	24	21
2021	268	22	11	24	26	26	15	22	19	26	25	27	25
2022	277	20	20	29	24	22	27	24	30	16	17	23	25
2023	293	28	14	28	28	19	22	30	23	24	22	30	25

Source: TÜİK, 2024i.

Appendix B

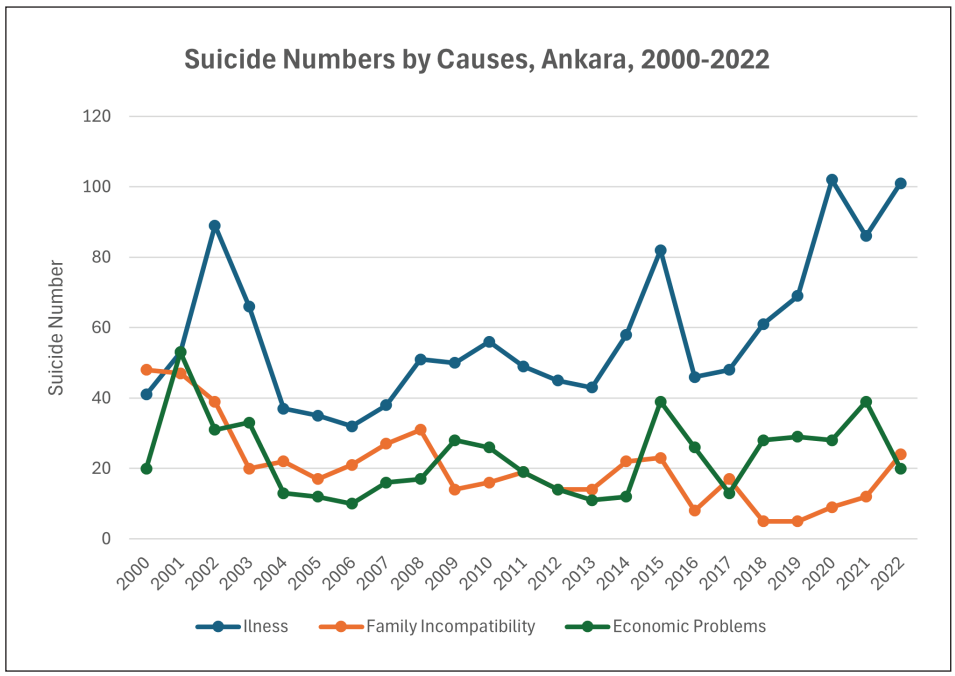

Figure B1. Suicide numbers by causes in Ankara 2000-2022. Source: TÜİK, 2024h.

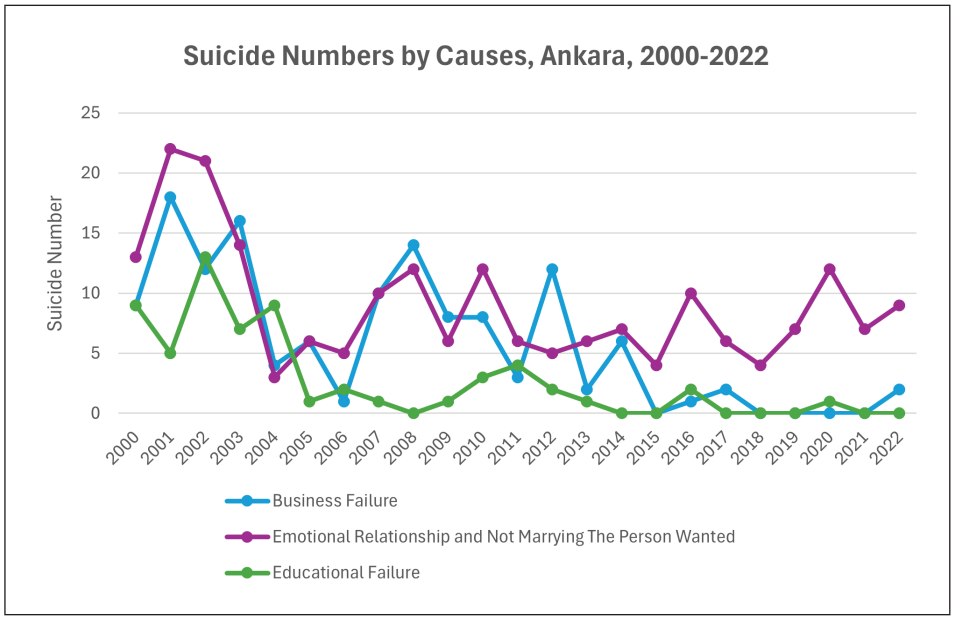

Figure B2. Suicide numbers by causes in Ankara 2000-2022. Source: TÜİK, 2024h.

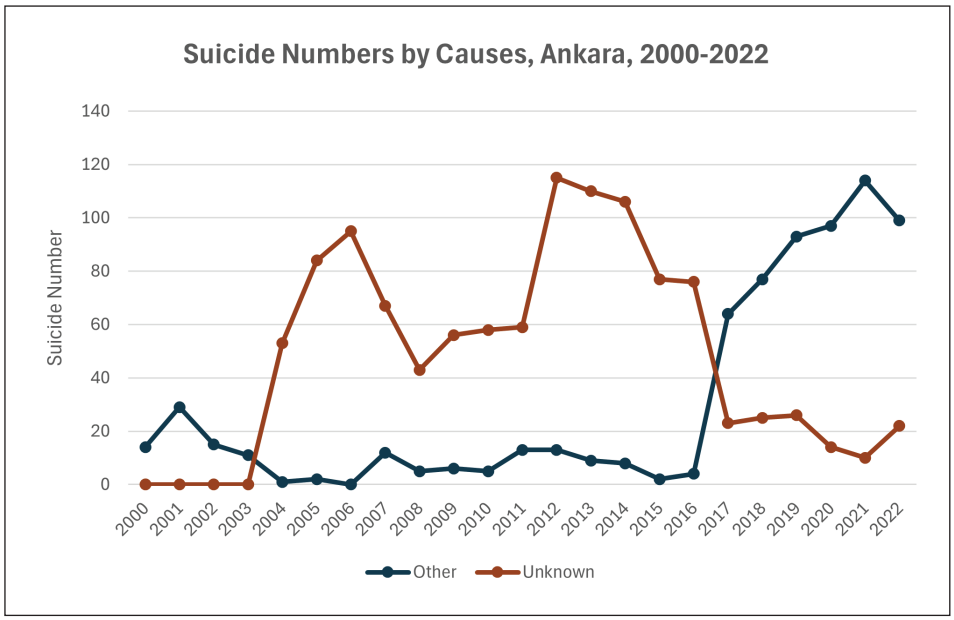

Figure B3. Suicide numbers by causes in Ankara 2000-2022. Source: TÜİK, 2024h.