

Received: May 2023 Accepted: June 2023  
DOI: <https://doi.org/10.58262/ks.v11i3.055>

## An Inquiry into Suicide: Conceptualization, Etiology, and Prophylactic Measures

Ahed J Alkhatib\*<sup>1</sup>, Nawaf Abdullallah Mohammad Alrakaf<sup>2</sup>

### **Abstract:**

*Suicide is a complex issue with multiple contributing factors. Research on suicide primarily focuses on identifying risk factors, protective factors, and effective interventions for suicide prevention. Risk factors for suicide include mental health disorders such as depression, anxiety, and bipolar disorder, substance abuse, history of trauma or abuse, familial history of suicide, access to lethal means, and social isolation. Protective factors against suicidal thoughts and actions include a strong social network, mental health care, and effective coping strategies for managing stress and difficulties. Research has identified effective techniques for preventing suicide, such as psychotherapy, medication, and crisis intervention programs. Suicide prevention efforts focus on raising public awareness of mental health issues, reducing the stigma associated with mental health, and expanding access to mental health treatments. Research on suicide emphasizes the significance of using a multifaceted approach to address the issue of suicide. This method aims to enhance mental health treatment, increase awareness and education, and tackle social and environmental factors that influence the risk of suicide.*

**Keywords:** *Suicide, suicidal ideation, suicide attempt, suicide prevention, protective factors.*

### **Introduction:**

Because suicide is so common among people of all ages, genders, and socioeconomic backgrounds, it is a global public health concern (Alkhatib, 2023). According to the World Health Organization (2021), suicide is the second most common cause of death worldwide for individuals between the ages of 15 and 29. Every year, suicide claims the lives of about 800,000 people.

Suicide is a complex problem with a wide range of contributing causes, including psychological, social, and environmental aspects. To create effective preventative programs, it is critical to understand the patterns, factors, and approaches that lead to suicide (CDC, 2021). This article aims to investigate the rising rates of suicide worldwide, considering their reasons, techniques, prevalence, and possible mitigation strategies.

Suicide is a significant issue in public health and contributes to premature death. To prevent suicide, extensive research has been dedicated to studying the elements that contribute to it,

---

<sup>1</sup> Department of Legal Medicine, Toxicology and Forensic Medicine, Jordan University of Science & Technology, Jordan Mobile no: 00962795905145  
Email: [ajalkhatib@just.edu.jo](mailto:ajalkhatib@just.edu.jo), ORCID: 0000-0003-3359-8128, International Marinskaya Academy, department of medicine and critical care, department of philosophy, Academician secretary of department of Sociology. [ajalkhatib@just.edu.jo](mailto:ajalkhatib@just.edu.jo), Cypress International Institute University, Texas, USA.

<sup>2</sup> MOH, Saudi Arabia

mostly focused on individual risk factors, specifically depression (Alkhatib, 2023). Aside from internal factors, much research has also been conducted on the social environment, focusing on social isolation (Motillon-Toudic et al., 2022). This research investigates the social aspect of the causes of suicide by reviewing the existing literature on the connection between suicide and social isolation (Motillon-Toudic et al., 2022).

Epidemiological studies indicated that suicide is a significant worldwide health concern, with over 700,000 global deaths attributed to suicide annually as of 2019 (World Health Organization, 2021). To effectively prevent suicide, it is crucial to comprehend the factors that lead to suicidal thoughts and attempts and to identify specific demographic segments that are more vulnerable than others. Durkheim (1897/1951) postulated in the late 19th century that marriage, which serves as a means of social integration, would mitigate the likelihood of suicide (Kposowa et al., 2020). Since Durkheim's research, other global studies have consistently found that marriage has a protective effect against suicide (Yip et al., 2012; Yip et al., 2015; Chen et al., 2024). In addition, Kposowa et al. (2020) conducted a detailed examination of Durkheim's theories using longitudinal data. Their results mostly supported Durkheim's core argument that marriage provides a greater level of protection against suicide risk compared to other marital statuses.

Marriage in Hong Kong has always been seen as a mitigating factor against the risk of suicide (Yip et al., 2015). Studies conducted around the beginning of the 21st century have found that individuals who have never been married or who have been divorced are more likely to be at risk of suicide compared to those who are married (Næss et al., 2021). This increased vulnerability to suicide risk is particularly evident among younger age groups (Wyder et al., 2009). These findings were reported by Yip et al. in 2012. Furthermore, research conducted in Hong Kong, utilizing data from 1981 to 1993, revealed that men experienced greater advantages from marriage compared to women in terms of their ability to safeguard against suicide (Yip, 1998). During the period examined, the marriage did not seem to offer significant protection against suicide for women of any age group (Yip et al., 2012). This suggests that gender differences may help explain why marriage is generally seen as a protective factor against suicide.

It is possible to define suicide as a self-directed death. A behavior that has been linked to biological, sociological, and psychological characteristics (Brokke et al., 2020). Suicide is a very complicated conduct that has been associated with these factors. In developed countries, it is regarded as one of the top ten causes of death among people of varying ages at the time of death (Aboul-Hagag et al., 2013).

Debra and colleagues (2013) researched the conditions that are related to suicide in the United States throughout the period spanning from 2005 to 2008. Participants in the study ranged in age from 10 to 17 years old, and there were a total of 1046 participants. There were approximately 75% of fatalities occurred in males, approximately 69% of deaths occurred in non-Hispanic whites, approximately 58% of deaths occurred in individuals between the ages of 16 and 17 years old, approximately 50% of deaths were caused by hanging, strangling, or suffocation, and approximately 83% of deaths took place in a house or apartment. The following were some of the factors that were connected with suicide: interpersonal problems, recent crises, mental health problems, problems with intimate partners, and problems at school.

After accounting for age and gender, the Office of Mental Health and Suicide Prevention (OMHSP) of the Department of Veterans Affairs (VA) has released new estimates that show that the suicide mortality rate (SMR) among veterans is 51% higher than that of civilians.

Suicidal behavior and suicide risk have been linked to several factors (Franklin et al., 2017). Geographical location is one such risk factor; the United States Mountain West area has a substantially higher SMR than the nation as a whole. Numerous factors, such as rurality, gun ownership, race and ethnicity, access to healthcare, isolation, substance abuse, and domestic violence, have been proposed as explanations for this difference (Betz et al., 2011; Reno et al., 2018). However, since the increased SMR in the Mountain West is consistent across a wide range of demographic differences (Pepper, 2017), it seems unlikely that these factors alone could account for the robust effects observed. As a result, there is increasing interest in learning more about the relationship between suicide risk and high altitude (Wang et al., 2022).

Suicide epidemiological studies demonstrated that suicide was the third cause of death among persons between the age of 10-17 years in the United States in 2008 (Centers for Disease Control and Prevention, 2011). Other studies have identified suicide-associated factors with youth that included problems related to mental health and substance abuse, low self-esteem, peer and parental relationship problems, intimate partner problems, previous exposure to suicidal behavior, and academic difficulties (Borowsky et al., 2001; Portzky et al., 2009; Madge et al., 2011).

In a study undertaken by Kumar et al (2013), the objective was to examine instances of suicide on the railway in the Lucknow region of India. A retrospective investigation was done, encompassing train-pedestrian fatalities that occurred between 2007 and 2012. Research findings indicated a higher propensity for suicide among males compared to females. 50% of the victims fell within the age range of 20 to 39 years. Approximately 23% of accidents took place when an individual was in the act of crossing the tracks, either by passing in front of the train or by illegally crossing the lines (approximately 21%). A notable discovery was made indicating that approximately 43% of the victims exhibited symptoms of alcohol toxicity, while female victims were more prone to experiencing mental health issues (around 56%) compared to their male counterparts.

Based on the data on unintentional deaths and suicides in India in 2010, there has been a significant rise in the number of fatalities resulting from railroad accidents, with a percentage increase of 120.8%. Most of the casualties were male. Approximately 3% of these cases were determined to be suicides (Vijayakumar, 2010).

As per the Official Statistics of India (2005), the predominant methods of suicide in India were poisoning (36.6%), hanging (32.1%), and self-immolation (7.9%). Railway suicides accounted for approximately 3% of all suicides. European epidemiological research has shown that the percentage of suicides that occur on railways falls within the range of 5 to 7% (Symonds, 1994; Deisenhammer et al., 1997; Baumert et al., 200; Rådbo et al., 2005).

Aboul-Hagag et al (2013) conducted a study to examine the legal and medical aspects of suicide fatalities in the Sohag governorate, which is situated in Upper Egypt. The study found a total of 42 cases of suicide, with a greater occurrence among females. The results revealed that the occurrence of suicide-related deaths varied between 0.16 and 0.35 per 100,000 individuals. The age group with the highest prevalence of suicide deaths was individuals between the ages of 15 and 30, irrespective of gender. A higher incidence of suicide was observed among persons living in rural areas (83.3%), those with no formal education (81.0%), and unmarried adults (69.0%). Poisoning emerged as the predominant method of suicide for both genders, accounting for 78.6% of all suicide-related fatalities. The prevalence of suicidal fatalities was highest during the winter season (45.2%) and summer season (42.9%) for both

males and females, while it was lowest during the autumn season (4.8%). The motive remained undisclosed in 57.1% of cases, while psychological issues were cited in 31.0% and financial difficulties in 11.9%. Taken together, the suicide rate in Sohag governorate is comparatively lower than in other regions globally, yet it remains a serious issue that requires significant attention and priority in terms of prevention. A psychological autopsy is necessary in situations of suicide.

Significant variations in suicide rates exist between regions and countries. According to 2019 data from the World Health Organization, Eastern Europe, specifically Belarus, Lithuania, and Russia, has the highest suicide rates. Conversely, rates in the Caribbean, Latin America, and the Middle East are significantly lower than the global average. A rise in the incidence of suicides has been documented in recent years across multiple nations, with a particular emphasis on the younger demographic (WHO, 2021).

Since 2000, the yearly incidence of suicide fatalities in the United States has exhibited a consistent upward trend. According to the Centers for Disease Control and Prevention (CDC), the annual suicide toll surpassed 47,000, placing it as the tenth most prevalent cause of mortality across the country in 2019. Suicide rates increased by 35% between 1999 and 2018, with the greatest rates occurring among men and those aged 45–54. In a similar fashion, rates of suicide have risen substantially in a number of European countries, including France and the United Kingdom. In 2018, there was an 11.8% increase in the number of suicide fatalities in the United Kingdom, with men having the highest suicide rate. From 2000 to 2018, the incidence of suicides in France escalated by 21% (WHO, 2021).

## **Reasons for Suicide**

Suicide is a complicated problem with many underlying reasons. Several risk factors raise the possibility of suicidal conduct, even when the precise reason of suicide is not usually known. These consist of:

1. Substance addiction and mental health disorders, especially depression.
2. Previous suicide attempts. A suicide history in the family.
3. Sexual or physical abuse.
4. Severe disease or agony.
5. Social exclusion is a lack of assistance.
6. A financial setback.
7. A broken relationship or divorce.
8. Experience of trauma or violence.
9. -Stigmatization or prejudice (Mann et al., 2005; Nock et al., 2008).

## **Suicide Methods**

Suicide can be carried out in several ways and different nations. In high-income countries, hanging is the most common method of suicide, followed by using guns and drugs that cause self-poisoning. For women in particular, self-poisoning is the most common strategy in low- and middle-income countries. Three more common methods of suicide are hanging, drowning, and jumping from a large height (Chang et al., 2019; Phillips et al., 2002).

Considering that over 800,000 individuals commit themselves annually, suicide is one of the biggest global public health concerns. In 2021, men will commit suicide at a higher rate than

women, with men making up 75% of all suicides globally, according to the World Health Organization (WHO, 2021). Despite this, the number of women taking their own lives has been rising over the past several years, especially in countries with low to moderate levels of affluence.

In the US, there are differences in suicide rates according to age, gender, race/ethnicity, and sexual orientation. Males had the highest suicide incidence, according to the Centers for Disease Control and Prevention (CDC, 2021), especially those between the ages of 45 and 54. Moreover, non-Hispanic White, American Indian, and Alaska Native communities have much higher suicide rates.

## **Reducing the Suicide Rates**

Suicide deaths can be prevented, but for preventive programs to be effective, they must adopt a comprehensive strategy that considers the wide range of risk factors (WHO, 2014). A list of potential strategies to lower the number of suicides is provided below:

- The advancement of mental health and wellness, encompassing the prompt identification and management of mental health conditions like depression and substance abuse, in addition to fostering adaptability and coping mechanisms.
- According to studies released by the Substance Abuse and Mental Health Services Administration (2019 7) and the World Health Organization (2014), strengthening social support networks is one aspect of offering aid and social ties.

There is a lack of comprehensive data on suicide rates in Arab countries, which makes it challenging to draw significant comparisons between them. However, by analyzing the data that is now at our disposal, we can gain a general understanding of the problem. The nations of Yemen, Palestine, and Iraq have the highest rates of suicide among Arab nations, per a 2018 poll that was published in the same year. The three nations with the lowest rates were Qatar, Kuwait, and the United Arab Emirates. Pridmore and Al-Showi (2018) discovered that although suicide rates in Arab nations are frequently lower than the global average, this difference is not always the case. Over the past few years, Jordan has seen a steady increase in the number of suicide deaths, with a significant peak predicted in 2020 because of the COVID-19 pandemic. The Jordan Times (2021) reported that the government has responded to the issue by increasing the availability of mental health resources and establishing a national suicide prevention hotline, among other measures. The suicide rate in Lebanon has been rising gradually since the start of the nation's political and economic crises in 2019. The World Health Organization has demanded that immediate action be taken to alleviate the effects that the crisis will have on people's mental health, according to The New Arab (2021). Since talking about suicide is frowned upon in Saudi Arabia, the government withholds official data on the nation's suicide rate from the general population. Mental health experts do, however, note a rise in the incidence of suicide attempts, especially among younger people (Al-Jazeera, 2018, WHO, 2021). To create successful preventative programs, there is generally a need for more comprehensive statistics on the suicide rates in Arab nations. The lack of available data may be attributed to several factors, including the stigma associated with mental health illnesses and the restricted access to mental health care in certain areas of the region. Addressing these issues will be crucial if we hope to see reductions in the suicide rate in the Arab world and better mental health outcomes.

## **Children committing suicide:**

Global awareness is important when it comes to the sad and challenging issue of child suicide. Even though the rates of suicide among children are generally lower than those of other age groups, there has been a discernible rise in recent years in many different countries worldwide. This essay will examine global trends in child suicide, considering its causes, frequency, and methods of prevention (Garenfeld et al., 2019; Naghavi et al., 2019). Suicide is the second leading cause of death worldwide for young people between the ages of 15 and 29, according to the World Health Organization (WHO, 2023). According to predictions, 143,000 deaths in this age group worldwide in 2019 will be attributable to suicide, making up 6% of all deaths in this age group. WHO, 2023 states that although the suicide rate among children under the age of 15 is lower than that of older teens, suicide is still a major concern for this age group. Suicide is the second most common cause of death for children in the United States between the ages of 10 and 14; among children between the ages of 5 and 9, it is the third most common cause of death. The CDC reports that between 2007 and 2018, the rate of suicide among children aged 5 to 9 nearly tripled, while the rate among children aged 10 to 14 increased by 56%.

Juvenile suicide does not always result from a single factor; instead, it is often the result of several factors coming together. Garenfeld et al. (2019) found that a child's risk of suicide can be increased by mental health conditions, exposure to violence or abuse, family conflict, bullying, scholastic stress, and social isolation. A number of mental health issues, including bipolar illness, depression, and anxiety, have been linked to suicide attempts among young people. Children who have a history of self-harm or suicide attempts are also more vulnerable, according to the American Academy of Pediatrics (2016).

## **Conclusions:**

Suicide is a complex issue with multiple contributing factors. Research on suicide primarily focuses on identifying risk factors, protective factors, and effective interventions for suicide prevention. Risk factors for suicide include mental health disorders such as depression, anxiety, and bipolar disorder, substance abuse, history of trauma or abuse, familial history of suicide, access to lethal means, and social isolation. Protective factors against suicide thoughts and actions include a strong social network, mental health care, and effective coping strategies for managing stress and difficulties. Research has identified effective techniques for preventing suicide, such as psychotherapy, medication, and crisis intervention programs. Suicide prevention efforts focus on raising public awareness of mental health issues, reducing the stigma associated with mental health, and expanding access to mental health treatments. Research on suicide emphasizes the significance of using a multifaceted approach to address the issue of suicide. This method aims to enhance mental health treatment, increase awareness and education, and tackle social and environmental factors that influence the risk of suicide.

## **References:**

- Accidental deaths and suicides in India (2005). National Crime Records Bureau. Ministry of Home Affairs. Government of India.
- Accidental deaths and suicides in India (2010). National Crime Records Bureau. Ministry of Home Affairs. Government of India.
- Al-Jazeera. (2018, September 8). Saudi Arabia: Taboo on suicide remains strong. <https://www.aljazeera.com/news/2018/9/8/saudi-arabia-taboo-on-suicide-remains-strong>

- Alkhatib, A. J. (2023). Understanding Suicide: International Trends, Causes, Prevalence, and Collaborative Solutions. *Transylvanian Review*, 31(1).
- American Academy of Pediatrics. Suicide prevention and resilience in children and adolescents. *Pediatrics*. 2016;138(1): e20161420. <https://pediatrics.aappublications.org/content/138/1/e20161420>.
- Baumert J, Erazo N, Ladwig KH (2005). Ten-year incidence and time trends of railway suicides in Germany from 1991 to 2000. *Eur J Public Health*, 16(2):173-8.
- Betz, M.E., Valley, M.A., Lowenstein, S.R., Hedegaard, H., Thomas, D., Stallones, L., Honigman, B., 2011. Elevated suicide rates at high altitude: sociodemographic and health issues may be to blame. *Suicide Life-Threatening Behav.* 41, 562–573. <https://doi.org/10.1111/j.1943-278X.2011.00054.x>
- Borowsky IW, Ireland M, Resnick MD (2001). Adolescent suicide attempts: Risks and protectors. *Pediatrics*, 107:485–93.
- Brokke, S. S., Landrø, N. I., & Haaland, V. Ø. (2020). Cognitive Control in Suicide Ideators and Suicide Attempters. *Frontiers in psychology*, 11, 595673. <https://doi.org/10.3389/fpsyg.2020.595673>.
- C.M. Pepper. Suicide in the Mountain West region of the United States. *Crisis J. Crisis Intervent. Suicide Prevention*, 38 (5) (2017), pp. 344-350.
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (2011). Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. Source data from WISQARS is the National Vital Statistics system from the National Center for Health Statistics, 2008. Available at: <http://www.cdc.gov/injury/wisqars/index.html>. Accessed September 20, 2011.
- Centers for Disease Control and Prevention. (2021). Suicide. <https://www.cdc.gov/suicide/index.html>.
- Centers for Disease Control and Prevention. National Vital Statistics System: Mortality data. Underlying cause of death, 1999-2019. CDC WONDER Online Database. <https://wonder.cdc.gov/>. Accessed on April 23, 2023.
- Chang, B. P., Franklin, J. C., Ribeiro, J. D., Fox, K. R., Bentley, K. H., Kleiman, E. M., & Nock, M. K. (2019). Biological risk factors for suicidal behaviors: A meta-analysis. *Translational Psychiatry*, 9(1), 1-10. <https://doi.org/10.1038/s41398-019-0432-x>
- Chen, J., Lui, I. D., Hsu, Y. C., & Yip, P. S. F. (2024). Patterns in suicide by marital status in Hong Kong, 2002-2020: Is marriage still a protective factor against suicide?. *Journal of Affective Disorders*, 346, 31–39. <https://doi.org/10.1016/j.jad.2023.10.100>.
- Debra L. Karch, J. Logan, Dawn D. McDaniel, C. Faye Floyd, Kevin J. Vagi (2013). Precipitating Circumstances of Suicide Among Youth Aged 10–17 Years by Sex: Data From the National Violent Death Reporting System, 16 States, 2005–2008. *Journal of Adolescent Health* 53, S51–S53.
- Deisenhammer EA, Kemmler G, De Col C, Fleishhacker WW, Hinterhuber H (1997). Eisenbahnsuizide und suizidversuche in Österreich von 1990-1994. *Nervenarzt*, 68:67-73.
- E. Reno, T. Brown, M. Betz, M. Allen, L. Hoffecker, J. Reitingger, B. Honigman. Suicide and high altitude: an integrative review *High Alt. Med. Biol.*, 19 (2) (2018), pp. 99-108.
- Franklin, J.C., Ribeiro, J.D., Fox, K.R., Bentley, K.H., Kleiman, E.M., Huang, X., Musacchio, K.M., Jaroszewski, A.C., Chang, B.P., Nock, M.K., 2017. Risk factors for suicidal thoughts and behaviors: a meta-analysis of 50 years of research. *Psychol. Bull.* 143 (2), 187–232. <https://doi.org/10.1037/bul0000084>.
- Garenfeld K, et al. Trends in suicide in children aged 5-14 years in 21 countries, 2000-2015: an

- analysis of WHO mortality database. *The Lancet Psychiatry*. 2019;6(9): 782-790. [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(19\)30272-0/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(19)30272-0/fulltext)
- Khaled El-Sayed Aboul-Hagag, Farag Awad Ahmed, Ali E. Mansour (2013). Forensic analysis of suicide mortality in Sohag governorate (Upper Egypt) in the period 2005–2009. *Egyptian Journal of Forensic Sciences*, 3, 53–60.
- Kposowa, A.J., Aly Ezzat, D., Breault, K.D., 2020. Marital status, sex, and suicide: new longitudinal findings and Durkheim's marital status propositions. *Sociol. Spectr.* 40, 81–98. <https://doi.org/10.1080/02732173.2020.1758261>.
- Madge N, Hawton K, Corcoran P, et al (2011). Psychological characteristics, stressful life events and deliberate self-harm: Findings from the Child & Adolescent Self-harm in Europe (CASE) study. *Eur Child Adolesc Psychiatry*, 20: 499–508. <http://dx.doi.org/10.1007/s00787-011-0210-4>.
- Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., ... Hendin, H. (2005). Suicide prevention strategies: A systematic review. *JAMA*, 294(16), 2064-2074. <https://doi.org/10.1001/jama.294.16.2064>
- Motillon-Toudic, C., Walter, M., Séguin, M., Carrier, J. D., Berrouguet, S., & Lemey, C. (2022). Social isolation and suicide risk: Literature review and perspectives. *European psychiatry: the journal of the Association of European Psychiatrists*, 65(1), e65. <https://doi.org/10.1192/j.eurpsy.2022.2320>.
- Næss, E. O., Mehlum, L., & Qin, P. (2021). Marital status and suicide risk: Temporal effect of marital breakdown and contextual difference by socioeconomic status. *SSM - population health*, 15, 100853. <https://doi.org/10.1016/j.ssmph.2021.100853>.
- Naghavi M, et al. Global mortality from firearms, 1990-2016. *JAMA Network Open*. 2019;2(5):e193161.
- Nock, M. K., Borges, G., Bromet, E. J., Cha, C. B., Kessler, R. C., & Lee, S. (2008). Suicide and suicidal behavior. *Epidemiologic Reviews*, 30(1), 133-154. <https://doi.org/10.1093/epirev/mxn002>.
- Phillips, M. R., Li, X., Zhang, Y., & Shi, Q. (2002). Suicide rates in China, 1995-99. *The Lancet*, 359(9309), 835-840. [https://doi.org/10.1016/S0140-6736\(02\)07954-0](https://doi.org/10.1016/S0140-6736(02)07954-0).
- Portzky G, Audenaert K, van Heerignen K (2009). Psychosocial and psychiatric factors associated with adolescent suicide: A case-control psychological autopsy study. *J Adolesc*, 32:849–62.
- Pridmore, S., Al-Showi, N. (2018). Suicide in the Arab world. *Australasian Psychiatry*, 26(5), 508-511. <https://doi.org/10.1177/1039856218771613>
- Rådbo H, Svedung I, Andersson R (2005). Suicides and other fatalities from trainperson collisions on Swedish railroads: a descriptive epidemiologic analysis as a basis for system-oriented prevention. *J Safety Res*, 36:423-8.
- Sachil Kumar, Anoop K. Verma, Sandeep Bhattacharya, Uma Shankar Singh (2013). Epidemiology & preventive aspects of railway suicides and fatalities related to trespassing accidents. *Journal of Forensic and Legal Medicine*, 20, 1052-1056.
- Substance Abuse and Mental Health Services Administration. (2019). National suicide prevention lifeline. <https://www.samhsa.gov/suicide-prevention/national-suicide-prevention-lifeline>
- Symonds RL (1994). Psychiatric and preventative aspects of rail fatalities. *Soc Sci Med*, 38(3):431-5.
- The Jordan Times. (2021, February 23). Suicides up by over 30% in 2020 amid COVID-19 pandemic. <https://www.jordantimes.com/news/local/suicides-over-30-2020-amid-covid-19-pandemic>.



- The New Arab. (2021, March 24). Lebanon faces mental health crisis as suicides rise. <https://english.alaraby.co.uk/news/lebanon-faces-mental-health-crisis-suicides-rise>
- Vijayakumar L. (2010). Indian research on suicide. *Indian journal of psychiatry*, 52(Suppl 1), S291–S296. <https://doi.org/10.4103/0019-5545.69255>.
- Wang, X., Zamora-Resendiz, R., Shelley, C. D., Manore, C., Liu, X., Oslin, D. W., McMahon, B., Beckham, J. C., Kimbrel, N. A., Crivelli, S., & MVP Suicide Exemplar Workgroup (2022). An examination of the association between altitude and suicide deaths, suicide attempts, and suicidal ideation among veterans at both the patient and geospatial level. *Journal of psychiatric research*, 153, 276–283. <https://doi.org/10.1016/j.jpsychires.2022.07.017>.
- World Health Organization, 2021. Suicide worldwide in 2019: global health estimates. <https://www.who.int/publications/i/item/9789240026643>.
- World Health Organization. (2014). Preventing suicide: A global imperative. [https://www.who.int/mental\\_health/suicide-prevention/world\\_report\\_2014/en](https://www.who.int/mental_health/suicide-prevention/world_report_2014/en).
- World Health Organization. (2021). Mental health in the Eastern Mediterranean Region: Reaching the unreachable. [https://applications.emro.who.int/docs/EMROPub\\_2021\\_EN\\_21582.pdf?ua=1](https://applications.emro.who.int/docs/EMROPub_2021_EN_21582.pdf?ua=1).
- World Health Organization. (2021). Suicide data. [https://www.who.int/mental\\_health/prevention/suicide/suicideprevent/en/](https://www.who.int/mental_health/prevention/suicide/suicideprevent/en/)
- World Health Organization. Suicide prevention. <https://www.who.int/news-room/fact-sheets/detail/suicide>. Accessed on April 23, 2023.
- Wyder, M., Ward, P., & De Leo, D. (2009). Separation as a suicide risk factor. *Journal of affective disorders*, 116(3), 208–213. <https://doi.org/10.1016/j.jad.2008.11.007>
- Yip P. S. (1998). Age, sex, marital status and suicide: an empirical study of east and west. *Psychological reports*, 82(1), 311–322. <https://doi.org/10.2466/pr0.1998.82.1.311>.
- Yip, P. S., Chen, Y. Y., Yousuf, S., Lee, C. K., Kawano, K., Routley, V., Ben Park, B. C., Yamauchi, T., Tachimori, H., Clapperton, A., & Wu, K. C. (2012). Towards a reassessment of the role of divorce in suicide outcomes: evidence from five Pacific Rim populations. *Social science & medicine* (1982), 75(2), 358–366. <https://doi.org/10.1016/j.socscimed.2012.03.009>.
- Yip, P. S., Yousuf, S., Chan, C. H., Yung, T., & Wu, K. C. (2015). The roles of culture and gender in the relationship between divorce and suicide risk: a meta-analysis. *Social science & medicine* (1982), 128, 87–94. <https://doi.org/10.1016/j.socscimed.2014.12.034>.