eISSN 2255-0569

ORIGINAL

Refugee and suicide risk in Turkey: A single center cross-sectional study

Refugiados y riesgo de suicidio en Turquía: un estudio transversal de un solo centro

Hüseyin Şehit Burhan, Sena Inal Azizoğlu, Utku Özgündüz, Oya Güçlü

1. Başakşehir Çam and Sakura Training and Research Hospital, Department of Psychiatry, Istanbul, Turkey

Corresponding author
Hüseyin Şehit Burhan
E-mail: hsehid@gmail.com

Received: 5 - IX - 2023
Accepted: 2 - X - 2023

doi: 10.3306/AJHS.2024.39.01.78

Abstract

Objective: This article aims to examine the relationship between the psychiatric health status of refugees in Turkey and the Human Development Index (HDI) levels of the countries from which they originate.
Materials and methods: This cross-sectional observational study was conducted to investigate potential correlations between suicide rates and demographic characteristics, diagnostic categories, alcohol/substance abuse, and HDI among individuals in Turkey.
Results: In this study, 121 participants (mean age of 32.7 years, 52% male) with diagnoses of bipolar disorder (38%), psychotic disorders (43%), and depression (19%) were examined. Alcohol and substance abuse were present in 23% and 26% of participants, respectively. However, no significant demographic differences were found between those who had attempted suicide and those who hadn't. The only exception was the distribution of diagnoses (p=0.034). The depression group had the highest suicide rate (47.8%), followed by the bipolar group (26.09%), and the psychotic group (17.3%). A significant difference in substance abuse rates was found across diagnostic groups, with the depression group reporting the lowest rate. Despite these findings, regression analysis did not detect significant predictors of suicide attempts (p>0.05).
Conclusions: This study underscores suicide risk factors among immigrants, emphasizing the need for comprehensive research and suicide prevention strategies targeting diverse populations.

Key words: Refugee, alcohol abuse, substance abuse, suicide risk.

Resumen

Objetivo: Este artículo pretende examinar la relación entre el estado de salud psiquiátrica de los refugiados en Turquía y los niveles del Índice de Desarrollo Humano (IDH) de los países de los que proceden.
Materiales y métodos: Este estudio observacional transversal se llevó a cabo para investigar las posibles correlaciones entre las tasas de suicidio y las características demográficas, las categorías de diagnóstico, el abuso de alcohol/sustancias y el IDH entre los individuos en Turquía.
Resultados: En este estudio se examinaron a 121 participantes (edad media de 32,7 años, 52% varones) con diagnósticos de trastorno bipolar (38%), trastornos psicóticos (43%) y depresión (19%). El alcohol y el abuso de sustancias estaban presentes en el 23% y el 26% de los participantes, respectivamente. Sin embargo, no se encontraron diferencias demográficas significativas entre los que habían intentado suicidarse y los que no. La única excepción fue la distribución de los diagnósticos (p=0,034). El grupo con depresión tuvo la tasa de suicidio más alta (47,8%), seguido del grupo bipolar (26,09%) y el grupo psicótico (17,3%). Se encontró una diferencia significativa en las tasas de abuso de sustancias entre los grupos de diagnóstico, siendo el grupo de depresión el que registró la tasa más baja. A pesar de estos hallazgos, el análisis de regresión no detectó predictores significativos de intentos de suicidio (p>0,05).
Conclusiones: Este estudio subraya los factores de riesgo de suicidio entre los inmigrantes, enfatizando la necesidad de una investigación exhaustiva y de estrategias de prevención del suicidio dirigidas a poblaciones diversas.

Palabras clave: Refugiado, abuso de alcohol, abuso de sustancias, riesgo de suicidio.

Cite as: Burhan HŞ, Azizoğlu SI, Özgündüz U, Güçlü O. Refugee and suicide risk in Turkey: A single center cross-sectional study. *Academic Journal of Health Sciences 2024*; 39 (1):78-83 doi: 10.3306/AJHS.2024.39.01.78

Introduction

In 2021 globally, a staggering 89.3 million people have been forcibly displaced, with 6.8 million of them being refugees from the Syrian Arab Republic. Türkiye was the largest refugee-hosting country in the world in 2021, with nearly 3.8 million seeking refuge there[1].

Stateless individuals frequently face significant obstacles in accessing critical services like education or healthcare, formal employment, and the freedom to travel[1]. Research has indicated that displaced persons generally experience a lower quality of life than the residents of the countries where they seek asylum. However, there are numerous variables that can impact the quality of life of asylum seekers and refugees, either positively or negatively. Factors such as low socio-economic status, limited education, trauma, intense mental stress, adverse life events after migration, lengthy refugee status procedures, psychopathology, and aging can all contribute to a poor quality of life[2]. Refugees frequently struggle to have their basic needs met, including security, food, housing, and other social requirements. Health security is a significant challenge for refugees in transit from war-torn low-income countries to those with little social and economic development. The millions of Syrian refugees in Turkey, Lebanon, and Jordan have posed extreme challenges to their health and social care systems[3].

Refugees are particularly vulnerable to experiencing mental health problems[4]. Due to the traumas they have experienced, the challenging travel conditions, and the difficulties they face during the adaptation process, refugees may be more prone to emotional disorders, anxiety disorders, and post-traumatic stress disorder. The purpose of this study is to examine the relationship between the Human Development Index (HDI) of the country of origin and psychiatric disorders in refugees in Turkey. In this context, the prevalence of psychiatric disorders among refugees from countries with different HDI levels will be compared, and the underlying reasons for this relationship will be determined[5,6].

It is known that the traumas and stresses experienced by refugees can lead to psychiatric disorders. However, the depth and scope of this problem may vary depending on the HDI levels of the countries from which the refugees originate. HDI is a comprehensive indicator evaluated based on factors such as life expectancy, education level, and per capita income of a country. This indicator reflects a country's overall quality of life and the living conditions of its citizens. Therefore, it can be thought that HDI may have a decisive impact on the psychiatric health status of refugees[7].

This article aims to examine the relationship between the psychiatric health status of refugees in Turkey and the HDI levels of the countries from which they originate. This topic has not been adequately addressed in the current literature, and this study aims to fill this gap. This study aims to provide important results and recommendations for the creation and implementation of policies and interventions for the psychiatric health of refugees.

Material and methods

Participants and groups

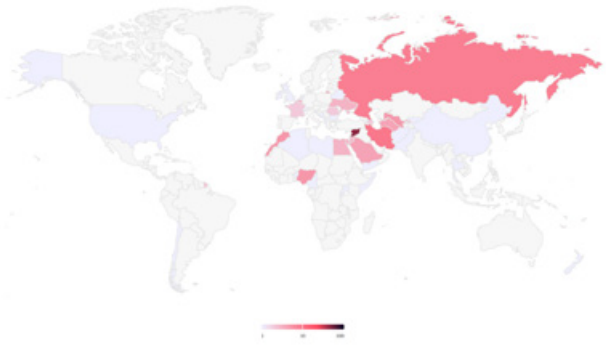
This study included 121 foreign patients who were hospitalized at Başakşehir Çam and Sakura City Hospital. This cross-sectional observational study was conducted to investigate potential correlations between suicide rates and demographic characteristics, diagnostic categories, alcohol/substance abuse, and Human Development Index (HDI) among individuals in Turkey. The demographic data collected included age, gender, marital status, and employment status. Clinical data included diagnosis, alcohol abuse status, substance abuse status, and duration of stay in Turkey. The Human Development Index (HDI) of each participant was also recorded. Participants were further divided into two groups: those who had attempted suicide (Suicide group) and those who had not (No-suicide group). The data was analyzed separately for these two groups and compared to identify any significant differences.

Measurements

The HDI indices, hospitalization rates, diagnoses, and alcohol and substance use rates of the participants were recorded in this study. The HDI indices were calculated using data published by the United Nations Development Programme in 2019 (United Nations Development Programme, 2019). The number of hospitalizations, diagnoses and substance-alcohol use were obtained from the hospital records of the participants.

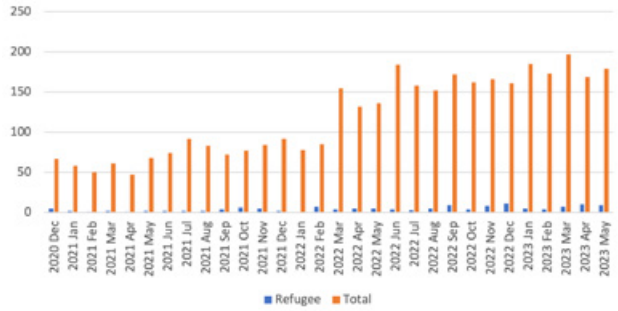
121 of the 3554 patients admitted to our hospital in the last 2 years (December 2020-May 2023) and admitted to our hospital were foreign nationals (**Figure 1**).

Figure 1: Country of origin.



The density distribution of these foreign nationals hospitalized according to the countries is schematized in **figure 2**.

Figure 2: Incidence of refugee and total admission.



Inclusion criteria

Our study included patients aged 18 years and older who were hospitalized in the psychiatry clinic of Başakşehir Çam and Sakura Training Hospital, and patients whose file records and data were sufficient and regular in retrospective scanning.

Exclusion criteria

Patients with insufficient and irregular patient records and data in the retrospective scan were excluded from the study. In addition, patients under the age of 18 and outpatients were not included in the study.

Ethical approval

The ethics committee of this study was obtained from the ethics committee of Başakşehir Çam and Sakura Training Hospital.

Limitations

- This study is limited to foreign patients who were hospitalized at Başakşehir Çam and Sakura City Hospital. Therefore, the generalizability of the results may be limited.
- The data used in this study was obtained from the participants' hospital records. Thus, there is a possibility of incomplete or inaccurate data.
- This study only considered specific factors, such as HDI indices, hospitalization rates, diagnoses, and alcohol and substance use rates. The exclusion of other factors or variables may limit the conclusions that can be drawn from the results.
- This study only conducted statistical analyses. Therefore, individual stories and experiences were not analyzed, and the conclusions are based solely on the researchers' interpretations.

Statistical analysis

The data analysis was conducted using SPSS statistical software. Firstly, a bivariate correlation analysis was performed to determine the relationship between HDI indices, hospitalization rates, diagnoses, and alcohol and substance use rates. Then, participants were divided into low, medium, and high HDI categories, and an ANOVA analysis was conducted to determine the differences in hospitalization rates, diagnoses, and alcohol and substance use rates among these categories.

Results

The analysis includes a total of 121 participants with a mean age of 32.7±12.5 years. Approximately 52% (n=63) of the participants were male. Regarding marital status, 45% (n=54) were single, 27% (n=33) were married, and 11% (n=13) were divorced. In the context of employment status, 19% (n=23) of the participants were working, and 43% (n=52) were not working. In terms of diagnosis, 38% (n=46) have been diagnosed with bipolar disorder, 43% (n=52) with psychotic disorders, and 19% (n=23) with depression. The data showed that 23% (n=28) of the participants had alcohol abuse issues, 60% (n=72) do not, and 17% (n=21). With respect to substance abuse, 26% (n=31) of the participants have issues with substance abuse, and 59% (n=71) do not. The average HDI for the sample was 697±35, and the average length of stay (LOS) in Turkey was 5.5±3.4 days (**Table I**).

Table I: Patients demographics.

	N or mean	% or SD
Age (year)*	32,70	12,50
Gender (M)	63,00	52,00%
Marital status		
Single	54,00	45,00%
Married	33,00	27,00%
Divorced	13,00	11,00%
NA	21,00	17,40%
Employment status		
Working	23,00	19,00%
Not-working	52,00	43,00%
NA	46,00	38,00%
Diagnosis		
Bipolar disorder	46,00	38,00%
Psychotic disorders	52,00	43,00%
Depression	23,00	19,00%
Alcohol abuse		
Yes	28,00	23,00%
No	72,00	60,00%
NA	21,00	17,00%
Substance abuse		
Yes	31,00	26,00%
No	71,00	59,00%
NA	19,00	15,00%
HDI*	697,40	135,10
Live in Turkey (year)*	5,50	3,40
LOS	21,80	15,10
Suicide		
Yes	32,00	26,00%
No	69,00	57,00%
NA	20,00	17,00%

*Mean, SD; LOS: Lenght of Stay, NA: Not available, HDI: Human developmental index

The mean age for the Suicide group was 32±13.1 while the No-suicide group had a mean age of 33.5±12.8 (p=0.590). Gender differences between the groups were not significant (p=0.336). There was

Table II: Comparison in terms of suicide attempt.

	Suicide (n=32)		No-suicide (n=69)		p-value
	N or mean	% or SD	N or mean	% or SD	
Age (year)*	32	13.1	33,50	12,8	0.590
Gender					0.336
Male	16	50%	36,00	52,17%	
Female	15	46.9%	33,00	47,83%	
Trans	1	3.1%	0,00	0,00%	
Marital status					0.564
Single	9	28.1%	20,00	28,99%	
Married	12	37.5%	33,00	47,83%	
Divorced	4	12.5%	5,00	7,25%	
Employment status					0.662
Working	5	15.6%	14,00	20,29%	
Not-working	14	43.7%	30,00	43,48%	
Diagnosis					0.034
Bipolar disorder	12	37.5%	24,00	34,78%	
Psychotic disorders	9	28.1%	35,00	50,72%	
Depression	11	34.4%	10	14,49%	
Alcohol abuse					0.676
Yes	21	65.6%	41	59,42%	
No	7	21.9%	17	24,64%	
Substance abuse					0.596
Yes	21	65.6%	41	59,42%	
No	7	21.9%	18	26,09%	
HDI*	693	127	696,10	137,1	0.909
Live in Turkey (year)*	5.5	3.3	5,9	3,5	0.741
LOS (days)*	22.4	14.65	22,8	16,4	0.905

* Mean, SD: independent T-test; LOS: Lenght of Stay, NA: Not available, HDI: Human developmental index.

no significant difference between groups in terms of marital status (p=0.564). In the context of employment status, the difference was not statistically significant between groups (p=0.662). In terms of diagnosis, the Suicide group had 12 (37.5%) individuals with bipolar disorder, 9 (28.1%) with psychotic disorders, and 11 (34.4%) with depression. The No-suicide group had 24 (34.8%) individuals with bipolar disorder, 35 (50.7%) with psychotic disorders, and 10 (14.5%) with depression. The distribution of diagnoses showed a significant difference between the two groups (p=0.034). Concerning alcohol abuse and substance abuse, the differences were not statistically significant (p=0.676, p=0.586, respectively). The average HDI was 693±127 for the Suicide group and 696±137 for the No-suicide group. The difference was not statistically significant (p=0.909). The mean duration of living in Turkey was not statistically significant (p=0.741). The average LOS was not statistically significant (p=0.905) (**Table II**).

No significant difference was found between groups in terms of age (p=0.145). The Bipolar group consisted of 23 (50%) males, 22 (47.8%) females, and 1 (2.2%) transgender individual. The Psychotic group included 29 (55.7%) males and 23 (44.2%) females, with no transgender individuals. The Depression group comprised 11 (47.8%) males and 12 (52.2%) females. Gender differences across groups were not significant (p=0.716). A significant difference was observed between groups (p=0.027) regarding marital status. The Bipolar group had a lower proportion of singles (19.6%) and a higher proportion of divorced individuals (17.4%) than the other groups. In the context of employment status, no significant differences were found between the groups (p=0.525). In terms of suicide rates, there was a significant difference (p=0.034). The Depression group had the highest rate of suicide at 47.8%, followed by the Bipolar group at 26.09%, and the Psychotic group at 17.3%. With respect to alcohol abuse, no significant differences were observed across the groups (p=0.236). However, substance abuse rates differed significantly between the groups (p=0.021), with the Depression group reporting the lowest rate (4.4%). The average HDI was similar across the groups, with no significant difference (p=0.777). The mean duration of living in Turkey differed between groups, but not significantly so (p=0.356). Lastly, the average length of stay (LOS) in the facility showed a trend toward significance (p=0.072), with the shortest stay observed in the Depression group (16.1 days) (**Table III**).

Regression analysis for suicide attempts was performed. Accordingly, no significant difference was detected among the items regarding suicide (p>0.05) (**Table IV**).

Discussion

Research exploring suicidal tendencies among immigrants can be challenging to assimilate into a coherent theoretical model due to the multifaceted and complex nature of the findings[8]. Some studies indicate a higher prevalence of suicide attempts among immigrants compared to the indigenous population, while others find

Table III: Comparison in terms of diagnosis.

	Bipolar disorders (n=46)		Psychotic disorders (n=52)		Depression (n=23)		
	N or mean	% or SD	N or mean	% or SD	N or mean	% or SD	p-value
Age (year)*	30,20	9,20	33,40	13	36,30	16,2	0,145
Gender							0.716
Male	23,00	50,00%	29,00	55,77%	11,00	47,83%	
Female	22,00	47,83%	23,00	44,23%	12,00	52,17%	
Trans	1,00	2,17%	0,00	0,00%	0,00	0,00%	
Marital status							0,027
Single	9,00	19,57%	20,00	38,46%	4,00	17,39%	
Married	21,00	45,65%	22,00	42,31%	11,00	47,83%	
Divorced	8,00	17,39%	1,00	1,92%	4,00	17,39%	
Employment status							0,525
Working	7,00	15,22%	10,00	19,23%	6,00	26,09%	
Not-working	20,00	43,48%	24,00	46,15%	8,00	34,78%	
Suicide							0,034
Yes	12,00	26,09%	9,00	17,31%	11,00	47,83%	
No	24,00	52,17%	35,00	67,31%	10,00	43,48%	
Alcohol abuse							0,236
Yes	14,00	30,43%	10	19,23%	4	17,39%	
No	23,00	50,00%	33	63,46%	16	69,57%	
Substance abuse							0,021
Yes	13,00	28,26%	17	32,69%	1	4,35%	
No	25,00	54,35%	27	51,92%	19	82,61%	
HDI*	708,60	136,90	690,60	134,8	690,40	136,1	0,777
Live in Turkey (year)*	5,10	2,80	4,9	3	6,7	4,2	0,356
LOS (days)*	21,30	12,00	24,8	17,1	16,1	14,2	0,072

* Mean, SD: independent T-test; LOS: Lenght of Stay, NA: Not available, HDI: Human developmental index.

Table IV: Regression analysis for Suicide attempt.

	B	S.E.	Wald	df	Sig.	Exp(B)
HDI	,000	,002	,039	1	,843	1,000
Age	-,031	,023	1,750	1	,186	,970
Gender	,140	,489	,082	1	,774	1,150
Alcohol abuse	-,223	,581	,147	1	,702	,800
Substance abuse	-,346	,593	,340	1	,560	,708
Diagnosis	,180	,332	,293	1	,588	1,197
Constant	,197	1,588	,015	1	,901	1,218

no substantial difference[9,10]. (Shoval et al., 2007; Lipsicas et al., 2014). Furthermore, multiple trends and processes suggested by the data underscore the variance in suicide attempts and death rates among these groups[11,12].

Complicating the matter further, immigrants and ethnic minorities often face disparities in accessing mental health services following suicide attempts or when experiencing suicidal ideation. This inequality in care potentially exacerbates mental health conditions and raises suicide risk.

The demographics of the participants in this study underscore the complexity of mental health and the multivariate factors influencing it. The diverse backgrounds, conditions, and experiences of these individuals, ranging from their marital status to substance and alcohol abuse and suicide attempts, offer a rich tableau for further analysis. This diversity can also inform the development of targeted therapeutic interventions to improve mental health outcomes.

However, our comparative analysis between those who attempted suicide (n=32) and those who did not (n=69) revealed no statistically significant differences across several parameters such as age, gender, marital status, employment status, substance or alcohol abuse, and length of stay in the country or hospital. These factors may not play a decisive role in suicide attempts among these patients.

Conversely, the Standardized Mortality Ratio (SMR) highlighted several diagnoses, such as borderline personality disorder, depression, bipolar disorder, opioid use, schizophrenia, anorexia nervosa, and alcohol use disorder, as significant risk factors for suicide. This reinforces the idea that clinical factors, such as diagnosis, may be more influential in predicting suicidal behavior than demographic or social factors.

Moreover, research indicates a threefold increase in suicide risk among psychiatric patients with concurrent alcohol or substance use[13]. Acute alcohol consumption, especially at high doses, was linked to a higher likelihood of suicide attempts, suggesting the need for interventions targeting alcohol use among individuals at risk[14].

Early detection and intervention are pivotal in suicide prevention, yet mental health conditions are often

undiagnosed and under-treated, particularly in primary healthcare settings[15,16].

Notably, the distribution of diagnoses showed a statistically significant difference between the suicide and no-suicide groups, with depression more prevalent in the former (34.4%) than in the latter (14.49%). This suggests the necessity for rigorous psychiatric evaluations and robust strategies to manage depression, which could significantly reduce suicide attempts in this population.

This research study additionally exposes the substantial gaps in the treatment of mental health disorders globally. These gaps are particularly pronounced in the treatment of major depressive disorder, with only one in five individuals in high-income countries and one in 27 in low to lower-middle-income countries receiving adequate treatment[17,18]. The treatment gap for alcohol use and dependency is even more alarming at 78%. Large treatment gaps also exist for depression (56%), bipolar disorder (50%), and schizophrenia (32%).

The insights derived from the demographic data, coupled with the finding that clinical factors such as diagnosis may be more indicative of suicide risk than sociodemographic factors, underscore the urgent need for healthcare systems to enhance mental health services. These services should particularly focus on the diagnosis and treatment of depression and other psychiatric disorders that have been associated with an increased risk of suicide.

Further, in light of the high prevalence of substance abuse, including alcohol abuse among patients, integrated treatment approaches that simultaneously address both psychiatric disorders and substance use disorders may be more effective in mitigating suicide risks.

The multitude of trends highlighted in this study emphasize the complexity of suicide risk factors and the challenges faced in suicide prevention. The data underscore the need for multifaceted and individualized therapeutic approaches in addressing mental health needs and suicidal tendencies. This includes improved access to mental health services, early detection and intervention strategies, and the provision of tailored treatment plans that take into account the diverse characteristics and backgrounds of patients.

Conclusions

While this study contributes to the existing body of literature on suicide risks among immigrants, it also highlights the gaps in understanding the multifaceted nature of suicide risk and the need for more comprehensive research. Future studies should strive to delve deeper into the interplay of sociodemographic and clinical factors influencing suicide risk, as well as to investigate effective strategies for suicide prevention, with a particular emphasis on mental health services and treatment access among diverse populations.

Conflict of interest

No

References

1. UN Refugee Agency. Global Trends Forced Displacement in 2021 [Internet]. UN Refugee Agency; 2022 [cited 2023 Jul 21]. Available from: https://www.unhcr.org/global-trends

2. Uygun E. The relation between syrians' quality of life, depression and anxiety levels and economic conditions: A cross-sectional study at an adult refugee mental health clinic in turkey. Anadolu Psikiyatri Derg. 2020;21(4):403-8.

3. Abou-Saleh MT, Christodoulou GN. Mental health of refugees: global perspectives. BJPsych Int. 2016;13(4):79-81.

4. Acarturk C, Uygun E, Ilkkursun Z, Carswell K, Tedeschi F, Batu M, et al. Effectiveness of a WHO self-help psychological intervention for preventing mental disorders among Syrian refugees in Turkey: a randomized controlled trial. World Psychiatry. 2022;21(1):88-95.

5. Akçapar P. Türkiye'deki Suriyeli Mültecilerin Yaşam Koşulları ve Geleceği. Uluslararası İlişkiler. 2016;13(51):71-84.

6. Alemi Q, Stempel C, Nguyen KH. Mental health of refugees and asylum seekers: knowledge and attitudes of public health experts. Eur J Public Health. 2017;27(3):ckx187.615.

7. UN Refugee Agency. Turkey: UNHCR Operational Update [Internet]. 2019 [cited 2023 Jul 21]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/75490.pdf

8. Kposowa AJ, McElvain JP, Breault KD. Immigration and Suicide: The Role of Marital Status, Duration of Residence, and Social Integration. Arch Suicide Res. 2008;12:82-92.

9. Lipsicas CB, Mäkinen IH, Wasserman D, Apter A, Kerkhof A, Michel K, et al. Repetition of attempted suicide among immigrants in Europe. Can J Psychiatry. 2014;59:539-47.

10. Shoval G, Schoen G, Vardi N, Zalsman G. Suicide in Ethiopian immigrants in Israel: A case for study of the genetic-environmental relation in suicide. Arch Suicide Res. 2007;11:247-53.

11. Ayalon L. Suicidal and Depressive Symptoms in Filipino Home Care Workers in Israel. J Cross Cult Gerontol. 2012;27:51-63.

12. Bhui KS, McKenzie K. Rates and risk factors by ethnic group for suicides within a year of contact with mental health services in England and Wales. Psychiatr Serv. 2008;59:414-20.

13. Darvishi N, Farhadi M, Haghtalab T, Poorolajal J. Alcoholrelated risk of suicidal ideation, suicide attempt, and completed suicide: A meta-analysis. PLoS One. 2015;10(5):e0126870.

14. Bagge CL, Conner KR, Reed L, Dawkins M, Murray K. Alcohol use to facilitate a suicide attempt: An event-based examination. J Stud Alcohol Drugs. 2015;76(3):474–481. doi:10.15288/jsad.2015.76.474.

15. Wasserman D, Rihmer Z, Rujescu D, Sarchiapone M, Sokolowski M, Titelman D, et al. The European Psychiatric Association (EPA) guidance on suicide treatment and prevention. Eur Psychiatry. 2012;27(2):129-41.

16. Lecrubier Y. Widespread underrecognition and undertreatment of anxiety and mood disorders: Results from 3 European studies. J Clin Psychiatry. 2007;68(2):36-41.

17. Kohn R, Saxena S, Levav I, Saraceno B. The treatment gap in mental health care. Bull World Health Organ. 2004;82(11):858-66.

18. Kara A. A review of childhood anxiety. J Clin Trials Exp Investig. 2022;1(3):64-70.