


## Evaluation and Management of the Suicide Risk in Psychiatry Patients

*Psikiyatri Hastalarında Özkıyım Riskini Değerlendirme ve Yönetme*

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### Abstract

The risk of suicide is very common among the patients with psychiatric disorder and needs an emergency response. There are some signs specific to the disorders indicating increased risk of suicide. It is important that firstly health workers must identify these early warning signs and determine the risk of suicide. After evaluating the risk of suicide, what needs to be done is to establish a safety plan with the patient. Safety plan is an important initiative that protects the patient from suicide attempt and guides the patient about what to do when the crisis is experienced. The safety plan includes information such as strategies to be used by the patient to stay safe, early warning signs, coping strategies, contact information for social supports, family members or friends and telephone numbers of crisis units. It is recommended that the security plan prepared in the light of this information should be used by psychiatric nurses in the clinic. The creation of a safety plan will prevent or delay the patient's risk of attempted suicide as much as possible.

**Keywords:** Suicide, risk assessment, safety plan.

### Öz

Özkıyım riski psikiyatrik sorunu olan hastalar arasında oldukça sık görülen ve acil müdahale edilmesi gereken bir durumdur. Özkıyım riskinin arttığını gösteren hastalıklara özgü bazı işaretler bulunmaktadır. Sağlık çalışanlarının önce bu erken uyarı işaretlerini tanımlamaları ve özkıyım riskini belirlemeleri önemlidir. Özkıyım riskini değerlendirdikten sonra yapılması gereken şey hastayla birlikte bir güvenlik planı oluşturmaktır. Güvenlik planı hastayı özkıyım girişiminden koruyan ve kriz yaşadığında neler yapacağı konusunda yol gösteren önemli bir girişimdir. Güvenlik planı; güvende kalmak için hastanın kullanacağı stratejiler, erken uyarı işaretleri, baş etme stratejileri, sosyal destekleri, aile bireyleri veya arkadaşlarına ilişkin iletişim bilgileri ve kriz birimlerinin telefon numaraları gibi bilgileri içermektedir. Bu bilgiler ışığında hazırlanan güvenlik planının özellikle psikiyatri hemşireleri tarafından klinikte kullanılması önerilmektedir. Güvenlik planının oluşturulması, hastanın mümkün olduğunca özkıyım girişiminde bulunma riskini engelleyecek veya erteleyecektir.

**Anahtar sözcükler:** Özkıyım, risk değerlendirme, güvenlik planı.

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**SUICIDE** is defined as an aggression toward the self emerging with an individual's desire to voluntarily end his life (Koç 2016). Suicide is a serious problem that should be considered carefully in terms of both disrupting the patient's compliance with psychiatric treatment and reoccurring in the later stages of the disease (Mazalauškiene and Navickas 2012). Due to the fact that it is a multifaceted and complex phenomenon, being inadequate is possible when determining the etiology of suicide and the factors that effect the emergence of suicidal behavior (Gonda et al. 2012). However, suicide is a preventable problem. Therefore, knowing the risk factors for suicide in psychiatric diseases may help to plan the necessary interventions in the early stages and prevent the transformation of suicidal thought into action. Studies conducted in our country are aimed to determine the risk or frequency of suicide and experimental studies on this subject are appear to be inadequate. While in the literature abroad studies related to forming security plan and rendering this application a part of routine care continue. Concordantly, in this study, data in the body of literature on suicidal behavior and predictors of adult psychiatric patients are presented and general information about the patients' suicide risk assessment and the steps to be taken during the crisis intervention are presented.

## **Epidemiology of Suicide in Psychiatric Patients**

The incidence of suicide in psychiatric patients has been evaluated on the basis of disease and variable results have been obtained in different cultures, different sample numbers and different diseases. Of the 2000 patients treated in a psychiatric clinic, 13.8% were reported to have a history of suicide attempt (Bozkurt-Zincir et al. 2014). Of the 1838 people diagnosed depressive and/or having anxiety disorder, 16.8% were stated to have attempted suicide at least once (Stringer et al. 2013). Of the 269 patients admitted with major depressive disorder, 58% were stated to have suicidal thoughts (Sokero et al. 2003). In another study, 59.2% of the 233 patients diagnosed with major depressive disorder were stated to have suicidal thoughts (Pu et al. 2017). 13.1% of the 480 patients diagnosed with major depression and bipolar disorder, had attempted suicide (Abreu et al. 2018). With respect to these results, it can be said that the suicide incidence rate in patients diagnosed with depression varies between 13.1-59.2%.

In patients with bipolar disorder, the suicide incidence rate varies between 19.7-32.4%. In one study, it was reported that 25 to 50% of patients with bipolar disorder had attempted suicide-at least once in their lifetime and 8 to 19% had completed this attempt (Latalova et al. 2014). In a study conducted with 122 outpatients diagnosed with bipolar disorder, suicide attempt incidence rate was identified as 19.7% (Eroğlu et al. 2013). In another study, 32.4% of the 1099 patients who were retrospectively analysed attempted suicide once in their life and 19.8% of the 469 patients who were evaluated prospectively attempted suicide (Novick et al. 2010).

In studies with individuals with psychotic disorders suicide incidence rate was determined to be 8.5 to 39.2%. In one study, 30.2% of the 1048 in patents with psychotic disorder were stated to have a history of suicide attempt (Radomsky et al. 1999). In another study, it is stated that 34.5% of 264 people with psychotic disorders had a history of attempting suicide at least once (Suokas et al. 2010). In a study conducted in Canada investigating factors that could be related to suicide in people diagnosed with schizophrenia, 39.2% of the 101 schizophrenia patients were stated to have had at-

tempted suicide (Fuller-Thomson ve Hollister 2016). In another study, suicide incidence rate in the first episode of psychotic disorders was stated to be between 8.5% and 11.3% (Mazahauskiene and Navickas 2012).

Studies conducted with patients with different psychotic diagnoses also exist. 25.2% of 1244 cases receiving treatment for alcohol and substance abuse were determined to have attempted suicide at least once (Evren et al. 2001). According to a meta-analysis study, 8% of the 1179 patients with borderline personality disorder attempted suicide (Pompili et al. 2005). In a study conducted in Sweden with 36.788 patients with obsessive-compulsive disorder, it was stated that 11.7% of the patients attempted suicide and 1.5% passed away in consequence of the suicide attempt (Fernandez de la Cruz et al. 2017).

## **Suicide in Depression**

49.5% of the inpatients in a psychiatry clinic who had a history of suicide attempt were diagnosed with major depression after the attempt (Bozkurt-Zincir et al. 2014). Risk factors associated with major depressive disorder are stated as hopelessness, alcohol addiction, alcohol abuse, low social and professional functioning, poor perceived social support (Sokero et al. 2003). It was stated that patients who received major depressive disorder diagnosis and had suicidal thoughts had certain cognitive deficits and these deficits appeared in executive functions, motor speed functions and neuropsychologic functions (Pu et al. 2017). In a study conducted with 6008 women who were diagnosed with major depressive disorder, suicidal thoughts were determined to be associated with a large number of major depressive symptoms and negative life events, major depression history in the family, many episodes, experience of melancholy and early onset age (Zhu et al. 2013). It was stated that both hopelessness levels and suicide attempt and suicidal thoughts were higher in Alexithymic patients (İzci et al. 2015). Also in patients with depression diagnosis, both having a history of suicide attempts in the family and having had attempted suicide in the past are regarded as important factors for another suicide attempt (Takahashi 2001).

## **Suicide in Bipolar Disorder**

In a study with bipolar patients, a significant relation between suicide attempt and clinical features like female sex, duration of disease which indicates the severity of the disease, run-in period (latency), number of hospitalizations, total number of previous periods, number of depressive periods, number of mixed periods and presence of history of psychiatric disorder in the family (Eroğlu et al. 2013). It was reported that 44 patients diagnosed with bipolar disorder who had attempted suicide were single, suffered for a long period, unemployed and had substance abuse (Pompili et al. 2006). There for it can be said that suicidal behaviour is observed in both sexes. In another study, it was stated that related to suicide attempt certain factors such as history of suicide in the family, having had attempted suicide, early onset age, comorbid psychiatric disorders and hopelessness were present (Beyer ve Weisler 2016). Factors such as impulsivity, frequency of depressive episodes, early onset age, suicide attempt history, suicidal thoughts in the past, admission to many psychiatry clinics, presence of aggression, substance and alcohol abuse are found to be related with suicide attempt (Gonda et al. 2012,

Nery-Fernandes and Miranda-Scippa 2013). Factors found to be related with suicide attempt in manic period are prescription drug use in high doses, high alcohol consumption, presence of high impulsivity and hostile emotions (Pompili et al. 2008, Wierzbinski et al. 2014).

## **Suicide in Anxiety Disorders**

Anxiety and anxiety disorders are among the most important predictors in suicidal thoughts and suicide attempts (Bentley et al. 2016). Symptoms such as presence of comorbid borderline personality disorder, anger and conflict in patients with anxiety disorder are found to be related with recurring suicide attempts (Stringer et al. 2013). In another study, depression, impairment of mental health and low social support were associated with increased suicidal behaviour (Bomyea et al. 2013). In a study conducted with patients with obsessive-compulsive disorder it was emphasized that patients who had disturbances in the subjective sleep quality and were using additional medicine should be monitored at more frequent intervals with regard to suicide (Karakuş and Tamam 2018). In another study conducted with patients with obsessive-compulsive disorder factors such as suicide attempt history, personality disorder, substance abuse, being female, high education level and comorbid anxiety disorder were associated with suicide (Fernandez de la Cruz et al. 2017). In another study, patients with panic disorder were found to have higher impulsivity, depression and hopelessness levels and expressed more suicidal attempt history. Also it was stated that the age first suicidal attempt occurred had been lower than those without panic disorder (Nam et al. 2016). In a study conducted with patients with panic disorder or agoraphobia, it was determined that suicidal behaviour was relevant with hipocondriasis and obsessive-compulsive symptoms (Batinic et al. 2017). Again in patients with suicide attempt risk, it was detected that anxiety disorders such as social phobia, generalized anxiety disorder and post-traumatic stress disorder were observed more (Alves et al. 2016).

## **Suicide in Schizophrenia**

It was emphasized that in schizophrenic patients, psychotic symptoms such as auditory hallucinations and presence of insight was correlated with suicidal behaviour (Acosta et al. 2012). In a systematic revision study where risk factors that could be associated with suicide attempt in schizophrenic patients were evaluated, occurrence of suicide attempt was determined to be among young patients, patients with more than 10 years of duration of disease and later onset (>45 years old) patients with schizophrenia diagnosis, males, patients with high education levels, patients experiencing depressive symptoms, patients who have intense positive psychotic symptoms like auditory illusions and hallucinations, patients who have steady insight, patients who have suicide attempt history in the family, patients with increased comorbid substance abuse (Hor and Taylor 2010). Factors thought to be correlated with suicide attempts in the early stages of schizophrenia are lack of social support and lasting relationships, social disruption, psychotic features (scepticism, paranoid hallucinations, cognitive differentiation and agitation, negative symptoms, depression, hopelessness, and auditory hallucinations), substance addiction, perfectionism and good insight levels (Ventriglio et al. 2016). By looking at these study results, both negative symptoms and positive symptoms, especially halluci-

nations and illusions, can be said to be correlated with suicide risk. As a matter of fact, presence of a correlation between positive symptoms and suicide attempt and history as well as one between negative symptoms and suicide attempt and history in schizophrenic patients was determined (Abdollahian et al. 2009). Also suicide attempt in schizophrenic patients was determined to be more prevalent among females, those with substance abuse/addiction, depressives and those abused physically in childhood (Fuller-Thomson and Hollister 2016).

**Table 1. Security plan steps**

<p>Step 1: Early Warning Signs How do you feel when you have suicidal thoughts? What do you think? For instance, impulsivity, insomnia, an increase in substance use, worthlessness, helplessness</p>
<p>Step 2: Coping Strategies What you can do when you have suicidal thoughts without someone else's help? For instance, going for a walk, listening to music, using internet, taking a shower, exercising, doing something the person likes, reading a book or doing house chores</p>
<p>Step 3: Social Connections Who or what media, help keep your mind off of your problems for a while? Who makes you feel better when you socialize?</p>
<p>Step 4: Family Members or Friends That Could Be Asked for Help Who do you think you can get support from your family and friends during a crisis? When you feel under stress who is your supporter or who do you feel like you can talk to. What are your possible obstacles for reaching these individuals?</p>
<p>Step 5: Getting Support from Health Professionals Which mental health professionals would you want be included in the security plan? Are there any other caregivers you can receive care from? What are your possible barriers in reaching healthcare workers?</p>
<p>Step 6: Creating a Safe Environment What can you use during a suicide attempt? Do you have any firearms? Is there anything else you can reach or consider to use when you think about killing yourself? What can you do to protect yourself from these tools?</p>

## Suicide in Alcohol/Substance Use Disorders

Among individuals with alcohol/substance use disorder, factors such as dissociative symptoms, anxiety, depression, childhood trauma, suicide history in first degree relatives are reported to be influential in suicide attempt (Evren et al. 2003). In another study, males, those who are young, singles, reclusive people, those unemployed, those with low education levels, those who have alcohol and substance use history in family, those who experience health, social and legal issues related to substance use, those who engage in damaging and dangerous behaviors under the effect of substances, those with lower first substance use age were determined to attempt suicide (Evren et al. 2001). Lifelong suicidal thoughts in patients with substance use disorder were found to be correlated with borderline personality disorder, depressive disorders, sexual abuse, multiple drug use, attention deficit disorder with hyperactivity and motor impulsivity (Rodriguez-Cintas et al. 2018). In the same study, suicide attempts were found to be correlated with borderline personality disorder, lifelong emotional, physical or sexual abuse history, psychotic disorder diagnosis, multiple drug use, attention deficit disorder with hyperactivity and motor impulsivity (Rodriguez-Cintas et al. 2018).

## Suicide in Personality Disorders

It is emphasized that impulsivity observed in individuals with personality disorder might be correlated with suicidal tendency and especially substance use seen in borderline and antisocial personality disorders might lead to suicidal behaviour (Ak et al. 2009). 90% of the 50 people admitted to the emergency department of a hospital were determined to have a type of personality disorder. It was reported that of the cases respectively, 66% had borderline personality disorder, 56% had obsessive-compulsive personality disorder, 42% had paranoid and passive aggressive personality disorder (Yalvaç et al. 2014). Among patients with antisocial or borderline personality disorder, factors such as comorbid disorders like major depressive episodes or substance use disorder, negative life events, being subjected to sexual abuse in childhood were correlated with increased suicidal behavior (Links et al. 2003). In another study, borderline and narcissistic personality disorder was emphasized to be related to suicide attempt (Ansell et al. 2015). Being young, female and abusing alcohol are determined to be factors increasing suicide attempts in personality disorders (Doyle et al. 2016).

## Suicide in Eating and Nutrition Disorders

In a study conducted with young females with eating disorders, it was suicidal behaviour and self-injury were stated to be 60% and 49% respectively (Koutek et al. 2016). It was mentioned that crude mortality rate related to suicide in eating disorders varied between 0% and 5.3%, and depressive disorders, psychological disorders like alcohol/substance abuse, and personality disorders, internalization tendency, perfectionism, aggression, personality traits such as self punishment tendency and antisocial behavior increased the risk of suicide (Öncü and Sakarya 2013). Also, a positive correlation between obesity, suicidal behaviour and suicide attempt was reported (Wagner et al. 2013). Furthermore, suicide attempt was determined to be more frequent not among males but among obese females and young females are acknowledged as a significant risk group (Kim et al. 2016, Branco et al. 2017).

## Suicide in Sleep Disorders

A correlation between sleep disorders and suicidal thoughts and behavior was mentioned (Bernert and Joiner 2007). Especially, insomnia, hypersomnia, nightmares and panic attacks occurring during sleep are acknowledged as risk factors regarding suicide (Norra et al. 2011, Pigeon et al. 2012). In another study, low sleep quality, especially difficulty falling asleep and non-refreshing sleep was stated to be correlated with increased suicide risk (Bernert et al. 2014). In a systematic revision study where effect of psychosocial factors in the correlation between sleep disorders and suicide, factors such as negative cognitive evaluation, perceived social isolation and nonadvantageous emotion regulation strategies were determined to affect the correlation between sleep disorders and suicide (Littlewood et al. 2017).

## Suicide Risk Evaluation

Risk factors particular to disorders are evaluated in line with patient's diagnosis. Guidebooks should be used to evaluate suicide risk in patients. When evaluated in terms of

psychiatric history, patients with severe depression, acute psychosis, substance addiction, severe personality disorder, nonadherence or low controllability levels were stated to constitute high risk (Kutcher and Chehil 2007). When evaluated in terms of psychiatric symptoms, patients with hopelessness, severe hedonia, severe anxiety or panic attacks were stated to constitute high risk (Kutcher and Chehil 2007). When psychosocial histories are evaluated, patients who were divorced or widowers, were unemployed, had conflict in interpersonal relationships, had low success levels, had weak interpersonal relationships, had been subjected to sexual or physical abuse or were experiencing social isolation were stated to constitute high risk (Kutcher and Chehil 2007). Risk factors for suicide in older population were identified as being male; having personal traits like low socioeconomical levels, social isolation, hopelessness and addiction; presence of psychiatric and/or physical diseases and suicidal behavior in the past (Aslan and Hocaoglu 2014). In studies conducted with adolescents, factors such as having a mental disorder like major depressive disorder, conduct disorder, attention deficit disorder with hyperactivity; experiencing conflict in family or social circle; having attempted suicide before; substance use; having suicide attempt history in the family are reported to be factors affecting the suicide attempt (Karaman and Durukan 2013, Ünlü et al. 2014).

Whether the patient has thoughts of self injury, is thinking of attempting suicide, has tried to injure oneself, has a plan and has access to damaging tool should be evaluated (NSW Department of Health 2004). Not only the nature, severity and intensity of the risk of suicide but also patients reasons for willing to end ones life should be determined. Especially when, where, how and under which circumstances the patient will attempt suicide and whether he is willing to ask for help and implement proposed protective strategies should be evaluated (Power and McGowan 2011). Evaluating suicide risk is carried out by detailed clinic examination of each case thinking of suicide, speaking of suicide or presenting with suicide attempt. Persons thoughts and feelings regarding this matter should be uncovered, evaluation of suicide risk should be included in the routine psychiatric examination and when any risk factor is detected further investigation should be made. Cases who previously attempted suicide (in the last 3 to 6 months), clearly expressed suicidal intentions or during the examination mentioned suicidal thoughts and plans should be assessed preferentially.

### ***Scales***

There are some scale that can be employed in assessing suicide risk. Given below are those scales:

1. **Suicide Probability Scale:** The validity and reliability study of the scale was made by Atlı (2007), and with this scale patients' risk levels with regard to suicide can be assessed.
2. **P-Kuam Suicidal Ideation Scale:** The scale was developed by Haran and Berkun (1995), and with this scale presence of patients' suicidal thoughts can be assessed.
3. **Suicide Behaviour Scale:** The validity and reliability study of the scale was made by Bayam et al. (1995), and the scale consists of four items which are suicide plan and attempt, suicide idea, suicide threat and repeatability of suicide.
4. **Suicide Cognitions Scale:** The validity and reliability study of the scale was

made by Guzey-Yiğit and Yiğit (2017), and the scale is used to evaluate cognitions like unlovability, unbearability, and unsolvability particular to suicide.

5. **Reasons for Living Inventory:** The validity and reliability study of the scale was made by Durak et al. (1993), and the scale consists of dimensions of responsibility towards family, concerns about the child, fear of suicide, fear of social disapproval and moral obstacles.

Some scales that could be employed in assessing suicide risk indirectly are also mentioned. Given below are those scales:

1. **Anxiety Sensitivity Index-3:** The validity and reliability study of the scale was made by Mantar et al. (2010), and it was determined that the scale could be used to assess suicide risk in patients with depression (Can et al. 2015).
2. **Hospital Anxiety and Depression Scale:** In the study of Karamustafaloğlu et al. (2010), it was determined that the scale could be an auxiliary tool in designating suicide risk.
3. **Beck Hopelessness Scale:** Measures persons negative stand towards the future and perceived inadequacy for protecting oneself against negative life event (Perlman et al. 2011).

To summarize generally, there are many scales that can be safely employed regarding the suicide phenomenon in our country. However, we should be cautious as to which scale would be used for which population and when and which aspect we will address suicide before the study. Because different scales measure different aspects. For example, while some focus on suicidal behaviour, some focus on suicidal thoughts or intentions. Some scales Reasons For Living Inventory focus on protective factors that decrease suicide risk. Additionally, if the group that will be studied has attempted suicide before, preferring the Suicide Intention Scale and Suicide Ideation Scale might be more appropriate. As these scales include questions regarding previous suicide attempts, they are not suitable for assessing suicidal behaviour in groups who didn't attempt suicide. Also employing scales with yes or no questions is a better approach with illiterate patients, patients with low education levels and elderly patients experiencing difficulties with reading and comprehension. Yet, whichever scale we might employ, in some cases it might not be possible to evaluate the suicide risk.

## **Preparing Security Plan in Managing Suicide Risk**

Security plan which should be prepared with a patient with suicide risk under consultancy of health professionals is important in terms of patient feeling safe, protecting oneself from suicide attempt and guiding as to what to do when one is in a difficult situation. Security plan should be prepared with the person in the focus, its reliability should be increased and it should be reviewed frequently (Stanley and Brown 2012). A security plan example that could be used in patients with suicide risk is presented in Table 1. Security plan should be formed during the hospitalization of the patient and should include strategies to stay safe, early warning signs, coping strategies, telephone numbers of people who could give support and crisis units. Information of people who could give support, like family members or friends to whom the patient could reach in a time of crisis should also be included (Stanley and Brown 2008, Perlman et al. 2011).

First stage of security plan consists of recognizing warning signs. Personal situations, thoughts, images, ways of thinking, moods specific to the person constitute early



warning signs . Recognition of these signs contribute to the solution of the problem before crisis completely surfaces. Example of these signs could be depressive, hopeless and irritable mood. Additionally behavior like patients increase in time spent alone, in alcohol consumption or avoiding interactions could also be cited (Stanley and Brown 2008, Stanley and Brown 2012, Currier et al. 2015, Green et al. 2018).

**Table 2. A security plan**

Step 1: Early Warning Signs:	
1.	.....
2.	.....
Step 2: Coping Strategies:	
1.	.....
2.	.....
Step 3: Social Connections	
1.	Name: ..... Phone: .....
2.	Name: ..... Phone: .....
3.	Place: ..... Place: .....
Step 4: Family Members or Friends That Could Be Asked for Help	
1.	Name: ..... Phone: .....
2.	Name: ..... Phone: .....
3.	Name: ..... Phone: .....
Step 5: Getting Support from Health Professionals	
1.	Clinician's name: ..... Phone: .....
2.	Clinician's name: ..... Phone: .....
3.	Name of emergency care service: .....
	Address of emergency care service: .....
	Phone of emergency care service: .....
4.	Name of the suicide prevention unit: .....
	Address of the suicide prevention unit: .....
	Phone of the suicide prevention unit: .....
Step 6: Creating a Safe Environment	
1.	.....
2.	.....

Source: Stanley and Brown 2008

Coping strategies are reported to be attempts patient could make by oneself without getting help from anyone. Answer to the question "what could you do without someone else's help?" is sought from the patient. The reason for this is trying to increase patients self-efficacy and creating the feeling that one could overcome suicide desire and urge. Going for a walk, listening to music, using internet, taking a shower, exercising, doing something the person likes, reading a book or doing house chores could be among these strategies (Stanley and Brown 2008, Stanley and Brown 2012, Currier et al. 2015, Green et al. 2018).

It is important that persons patient could reach when first option can't be reached or social environments that has people around and will ensure patient's safety are listed by the patient while identifying the social connections. In the next step the patient should be asked for the names family members or friends he could ask for help and these people should be listed in preferential order. At this stage it is accepted that the patient is experiencing a crisis. Therefore if he has doubts about contacting these individuals, potential hindrances and ways of problem solving to overcome them should be identified. Also names, phone numbers and locations of clinicians from whom the

patient could receive care and names, numbers and addresses of emergency care services, suicide prevention units and help lines should be determined (Stanley and Brown 2008). A security plan prepared accordingly with this information is given in Table 2.

## Conclusion

Risk of suicide is a situation frequently observed among patients with psychiatric problems and requires urgent intervention. This risk increases in especially depression, bipolar mood disorders, schizophrenia, alcohol/substance use disorders, personality disorders, eating and nutrition disorders and sleep disorders. There are certain signs that indicate the increase in risk of suicide. Health professionals should identify these early warning signs first. Also some scales that could be employed when assessing suicide risk exist. These scales include Suicide Probability Scale, P-Kuam Suicidal Ideation Scale, Suicide Behaviour Scale, Suicide Cognitions Scale, Reasons for Living Inventory, Anxiety Sensitivity Index-3, Hospital Anxiety and Depression Scale, Beck Hopelessness Scale. What should be done after assessing the suicide risk is to create a security plan with the patient. Security plan is an important attempt that protects patient from suicide attempts and guides as to what to do during a crisis. Security plan includes information like the strategies that the patient could use in order to stay safe, early warning signs, coping strategies, people whom he could get support and telephone numbers of crisis units. Security plan prepared in consideration of these information are suggested to be used especially by psychiatry nurses in the clinics. Including in the patients care plan this initiative that will make patient feel safe, remind him during crisis or when experiencing helplessness that he has people to turn to and give the feeling that he can control this situation, will prevent or delay the patient from suicide attempt as far as possible. It is contemplated that this article would constitute a guide for the mental health professionals in relevant studies. In addition, a similar compilation is proposed to be done for adolescents.

## References

- Abdollahian E, Gharavi MM, Soltanifar A, Mokhber N (2009) Relationship between positive and negative symptoms of schizophrenia and psychotic depression with risk of suicide. *Iran J Psychiatry Behav Sci*, 3:27-32.
- Abreu LN, Oguendo MA, Galfavy H, Burke A, Grunebaum MF, Sher L et al. (2018) Are comorbid anxiety disorders a risk factor for suicide attempts in patients with mood disorders? A two-year prospective study. *Eur Psychiatry*, 47:19-24.
- Acosta FJ, Siris SG, Diaz E, Salinas M, del Rosario P, Hernandez JL (2012) Suicidal behavior in schizophrenia and its relationship to the quality of psychotic symptoms and insight- a case report. *Psychiatr Danub*, 24:97-99.
- Ak M, Gülsün M, Özmenler KN (2009) Özkıym ve kişilik. *Psikiyatride Güncel Yaklaşımlar*, 1:45-54.
- Alves V de M, Francisco LCF de L, Belo FMP, de Melo Neto VL, Barros VG, Nardi AE (2016) Evaluation of the quality of life and risk of suicide. *Clinics (Sao Paulo)*, 71:135-139.
- Ansell EB, Wright AGC, Markowitz JC, Sanislow CA, Hopwood CJ, Zanarini MC et al. (2015) Personality disorder risk factors for suicide attempts over 10 years of follow-up. *Pers Disord*, 6:161-167.
- Aslan M, Hocaoglu Ç (2014) Yaşlılarda intihar davranışı. *Psikiyatride Güncel Yaklaşımlar*, 6:294-309.
- Atlı Z (2007) İntihar olasılığı ölçeği (İOÖ)'nin klinik örneklemdeki geçerlik ve güvenilirlik çalışması (Yüksek lisans tezi). Aydın, Adnan Menderes Üniversitesi.
- Batinic B, Opacic G, Ignjatov T, Baldwin DS (2017) Comorbidity and suicidality in patients diagnosed with panic disorder/agoraphobia and major depression. *Psychiatr Danub*, 29: 186-194.
- Bayam G, Dilbaz N, Bitlis V, Holat H, Tüzer T (1995) İntihar davranışı ile depresyon, ümitsizlik, intihar düşüncesi ilişkisi: intihar davranış ölçeği geçerlilik, güvenilirlik çalışması. *Kriz Dergisi*, 3:223-225.
- Bentley KH, Franklin JC, Ribeiro JD, Kleiman EM, Fox KR, Nock MK (2016) Anxiety and its disorders as risk factors for suicidal

- thoughts and behaviors: a meta-analytic review. *Clin Psychol Rev*, 43:30-46.
- Bernert RA, Turvey CL, Conwell Y, Joiner TE (2014) Association of poor subjective sleep quality with risk for death by suicide during a 10-year period: a longitudinal, population-based study of late life. *JAMA Psychiatry*, 71:1129-1137.
- Bernert RA, Joiner TE (2007) Sleep disturbances and suicide risk: a review of the literature. *Neuropsychiatr Dis Treat*, 3:735-743.
- Beyer JL, Weisler RH (2016) Suicide behaviors in bipolar disorder: a review and update for the clinician. *Psychiatr Clin North Am*, 39:111-123.
- Bomyea J, Lang AJ, Craske MG, Chavira D, Sherbourne CD, Rose RD et al. (2013) Suicidal ideation and risk factors in primary care patients with anxiety disorders. *Psychiatry Res*, 209:60-65.
- Bozkurt-Zincir S, Zincir S, Köşker SD, Sünbül EA, Aksoy AE, Elbay RY et al. (2014) Yatarak tedavi gören psikiyatri hastalarında intihar girişiminin klinik özellikler ve sosyodemografik değişkenlerle ilişkisi. *Journal of Mood Disorders*, 4:53-58.
- Branco JC, Motta J, Wiener C, Oses JP, Pedrotti-Moreira F, Spessato B et al. (2017) Association between obesity and suicide in woman, but not in man: a population-based study of young adults. *Psychol Health Med*, 22:275-281.
- Can SS, Uğurlu GK, Atağün Mİ, Kaymak SU, Uğurlu M, Yenilmez D et al. (2015) Effects of anxiety sensitivity index-3 on suicide risk assessment. *Ankara Medical Journal*, 15:134-139.
- Currier GW, Brown GK, Brenner LA, Chesin M, Knox KL, Ghahramanlou-Holloway M et al. (2015) Rationale and study protocol for a two-part intervention: safety planning and structured follow-up among veterans at risk for suicide and discharged from the emergency department. *Contemp Clin Trials*, 43:179-184.
- Doyle M, While D, Mok PLH, Windfuhr K, Ashcroft DM, Kontopantelis E et al. (2016) Suicide risk in primary care patients diagnosed with a personality disorder: a nested case control study. *BMC Family Pract*, 17:106.
- Durak A, Yasak-Gültekin Y, Şahin NH (1993) İnsanları yaşama bağlayan nedenler nelerdir? Yaşamı Sürdürme Nedenleri Envanteri'nin (YSNE) güvenilirliği ve geçerliliği. *Türk Psikoloji Dergisi*, 8:7-19.
- Eroğlu MZ, Karakuş G, Tamam L (2013) Bipolar disorder and suicide. *Dusunen Adam*, 26:139-147.
- Evren EC, Üstünsoy S, Can S, Başoğlu C, Çakmak D (2003) Alkol /madde bağımlılarında özkıym girişi öyküsünün klinik belirtilerle ilişkisi. *Klinik Psikiyatri Dergisi*, 6:86-94.
- Evren C, Evren B, Ögel K, Çakmak D (2001) Madde kullanımı nedeni ile yatarak tedavi görenlerde intihar girişimi öyküsü. *Klinik Psikiyatri Dergisi*, 4:232-240.
- Fernandez de la Cruz L, Rydell M, Runeson B, D'Onofrio BM, Brander G, Rück C et al. (2017) Suicide in obsessive-compulsive disorder: a population-based study of 36788 Swedish patients. *Mol Psychiatry*, 22:1626-1632.
- Fuller-Thomson E, Hollister B (2016) Schizophrenia and suicide attempts: findings from a representative community-based Canadian sample. *Schizophr Res Treatment*, 2016: 3165243.
- Green JD, Kearns JC, Rosen RC, Keane TM, Marx BP (2018) Evaluating the effectiveness of safety plans for military veterans: do safety plans tailored to veteran characteristics decrease suicide risk? *Behav Ther*, 49:931-938.
- Gonda X, Pompili M, Serafini G, Montebovi F, Campi S, Dome P et al. (2012) Suicidal behavior in bipolar disorder: epidemiology, characteristics and major risk factors. *J Affect Disord*, 143:16-26.
- Guzey-Yiğit M, Yiğit İ (2017) İntihar bililişi ölçeğinin psikometrik özelliklerinin değerlendirilmesi: geçerlik ve güvenilirlik çalışması. *Nesne Psikoloji Dergisi*, 5:363-383.
- Haran S, Berkson OE (1995) P-Kuam intihar düşüncesi ölçeği: ölçek geliştirme üzerine bir pilot çalışma. *Kriz Dergisi*, 3:206-207.
- Hor K, Taylor M (2010) Suicide and schizophrenia: a systematic review of rates and risk factors. *J Psychopharmacol*, 24:81-90.
- İzci F, Zincir S, Zincir SB, Bilici R, Gica S, Koç MSI et al. (2015) Suicide attempt, suicidal ideation, and hopelessness levels in major depressive patients with and without alexithymia. *Dusunen Adam*, 28:27-33.
- Karakuş G, Tamam L (2018) Obsesif kompulsif bozuklukta uyku ve özkıym ilişkisi. *Anadolu Psikiyatri Derg*, 19:37-44.
- Karaman D, Durukan İ (2013) Çocuk ve ergenlerde özkıym. *Psikiyatride Güncel Yaklaşımlar*, 5:30-47.
- Karamustafaloğlu O, Özcelik B, Bakım B, Ceylan YC, Yavuz BG, Güven T et al. (2010) İntiharı öngörebilecek bir araç: Hastane Anksiyete ve Depresyon Ölçeği. *Dusunen Adam*, 23:151-157.
- Kim DK, Song HJ, Lee EK, Kwon JW (2016) Effect of sex and age on the association between suicidal behaviour and obesity in Korean adults: a cross-sectional nationwide study. *BMJ Open*, 6:e010183.
- Koç M (2016) Depresif (çökkünlük) bozukluklar. In *Ruh Sağlığı ve Psikiyatri Hemşireliği* (Ed N Gürhan):475-538. Ankara, Nobel Tıp Kitabevleri.
- Koutek J, Kocourkova J, Dudova I (2016) Suicidal behavior and self-harm in girls with eating disorders. *Neuropsychiatr Dis Treat*, 12:787-793.
- Kutcher S, Chehil S (2007) *Suicide Risk Management: A Manual for Health Professionals*. Oxford, Wiley.
- Latalova K, Kamaradova D, Prasko J (2014) Suicide in bipolar disorder: a review. *Psychiatr Danub*, 26:108-114.
- Links PS, Gould B, Ratnayake R (2003) Assessing suicidal youth with antisocial, borderline, or narcissistic personality disorder. *Can*

- J Psychiatry, 48:301-310.
- Littlewood D, Kyle SD, Pratt D, Peters S, Gooding P (2017) Examining the role of psychological factors in the relationship between sleep problems and suicide. *Clin Psychol Rev*, 54:1-16.
- Mantar A, Yemez B, Alkin T (2010) Anksiyete duyarlılık indeksi-3'ün Türkçe formunun geçerlik ve güvenilirlik çalışması. *Türk Psikiyatri Derg*, 21:225-234.
- Mazalauksiene R, Navickas A (2012) Suicidal attempts during the first episode psychosis. *Sveikatos Mokslai*, 22:81-84.
- Nam YY, Kim CH, Roh D (2016) Comorbid panic disorder as an independent risk factor for suicide attempts in depressed outpatients. *Compr Psychiatry*, 67:13-18.
- Nery-Fernandes F, Miranda-Scippa A (2013) Suicidal behavior in bipolar affective disorder and socio-demographic, clinical and neuroanatomical characteristics associated. *Rev Psiq Clin*, 40:220-224.
- Norra C, Richter N, Juckel G (2011) Sleep disturbances and suicidality: a common association to look for in clinical practise and preventive care. *EPMA Journal*, 2:295-307.
- Novick DM, Swartz HA, Frank E (2010) Suicide attempts in bipolar I and bipolar II disorder: a review and meta-analysis of the evidence. *Bipolar Disord*, 12:1-9.
- NSW Department of Health (2004) Framework for Suicide Risk Assessment and Management for NSW Health Staff. North Sydney, NSWDepartment of Health.
- Öncü B, Sakarya D (2013) Yeme bozukluklarında özkıymı davranışı. *Psikiyatride Güncel Yaklaşımlar*, 5:48-59.
- Perlman C, Neufeld E, Martin L, Goy M, Hirdes J (2011) Suicide Risk Assessment Guide: A Resource for Canadian Health Care Organizations. Toronto, ON, Ontario Hospital Association and Canadian Patient Safety Institute.
- Pigeon WR, Pinquart M, Conner K (2012) Meta-analysis of sleep disturbance and suicidal thoughts and behaviors. *J Clin Psychiatry*, 73:e1160-e1167.
- Pompili M, Innamorati M, Michele R, Falcone I, Ducci G, Angeletti G et al. (2008) Suicide risk in depression and bipolar disorder: do impulsiveness-aggressiveness and pharmacotherapy predict suicidal intent? *Neuropsychiatr Dis Treat*, 4:247-255.
- Pompili M, Tondo L, Grispini A, De Pisa E, Lester D, Angeletti G et al. (2006) Suicide attempts in bipolar disorder patients. *ClinNeuropsychiaty*, 3:327-331.
- Pompili M, Girardi P, Ruberto A, Tatarelli R (2005) Suicide in borderline personality disorder: a meta-analysis. *Nord J Psychiatry*, 59:319-324.
- Power P, McGowan S (2011) Suicide Risk Management in Early Intervention. Dublin, National Mental Health.
- Pu S, Setoyama S, Noda T (2017) Association between cognitive deficits and suicidal ideation in patients with major depressive disorder. *Scientific Reports*, 7:11637.
- Radomsky ED, Haas GL, Mann JJ, Sweeney JA (1999) Suicidal behavior in patients with schizophrenia and other psychotic disorders. *Am J Psychiatry*, 156:1590-1595.
- Rodriguez-Cintas L, Daire C, Braghuis MD, Palma-Alvarez RF, Grau-Lopez L, Ross-Cucurull E et al. (2018) Factors associated with life time suicidal ideation and suicide attempts in outpatients with substance use disorders. *Psychiatry Res*, 262:440-445.
- Sokero TP, Melartin TK, Rytala HJ, Leskela US, Lestela-Mielonen PS, Isometsa ET (2003) Suicidal ideation and attempts among psychiatric patients with major depressive disorder. *J Clin Psychiatry*, 64:1094-1100.
- Stanley B, Brown GK (2012) Safety planning intervention: a brief intervention to mitigate suicide risk. *Cogn Behav Pract*, 19:256-264.
- Stanley B, Brown GK (2008) Safety Plan Treatment Manual to Reduce Suicide Risk: Veteran Version. Washington, DC, United States Department of Veterans Affairs.
- Stringer B, van Meijel B, Eikelenboom M, Koekkoek B, Licht CMM, Kerkhof AJFM et al. (2013) Recurrent suicide attempts in patients with depressive and anxiety disorders: the role of borderline personality traits. *J Affect Disord*, 151:23-30.
- Suokas JT, Perala J, Suominen K, Saarni S, Lönnqvist J, Suvisaari JM (2010) Epidemiology of suicide attempts among persons with psychotic disorder in the general population. *Schizophr Res*, 124:22-28.
- Takahashi Y (2001) Depression and suicide. *Japan Med Assoc J*, 124:359-363.
- Ünlü G, Aksoy Z, Ersan EE (2014) İntihar girişiminde bulunan çocuk ve ergenlerin değerlendirilmesi. *Pamukkale Tıp Dergisi*, 7:176-183.
- Ventriglio A, Gentile A, Bonfatto I, Stella E, Mari M, Steardo L et al. (2016) Suicide in the early stage of schizophrenia. *Front Psychiatry*, 7:116.
- Wagner B, Klinitzke G, Braher E, Kersting A (2013) Extreme obesity is associated with suicidal behavior and suicide attempts in adults: results of a population-based representative sample. *Depress Anxiety*, 30:975-981.
- Wierzbinski P, Zdanowicz A, Klekowska J, Broniarczyk-Czarniak M, Zboralski K (2014) The epidemiology of the suicide in bipolar disorder in the manic episode: preliminary reports. *Pol Merkur Lekarski*, 36:254-256.

Yalvaç HD, Kaya B, Ünal S (2014) İntihar girişimi ile başvuran bireylerde kişilik bozukluğu ve bazı klinik değişkenler. Anadolu Psikiyatri Derg, 15:24-30.

Zhu Y, Zhang H, Shi S, Gao J, Li Y, Tao M et al. (2013) Suicidal risk factors of recurrent major depression in Han Chinese women. Plos One, 8:80030.

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