Psycho-social correlates of suicidal behaviour

Zoltan Rihmer[1,2], Annamária Rihmer[3], Zsuzsanna Belteczki[4]

[1] *Department of Psychiatry and Psychotherapy, Semmelweis University, Budapest*
[2] *National Institute of Mental Health, Neurology and Neurosurgery, Budapest, Hungary*
[3] *Private practice, Budapest, Hungary*
[4] *Santha Kalman Psychiatric Hospital Nagykallo, Hungary*

Although suicidal behaviour is quite rare in the absence of current major mental disorders, the majority of these patients do not complete or attempt suicide. Therefore, as the scientific literature shows, other (psychological and social) suicide risk factors also play a contributory role. In this paper we will shortly review the clinically significant psychological and social correlates of suicidal behaviour that can help clinicians in recognising and managing suicide risk.
(Neuropsychopharmacol Hung 2022; 24(4): 162–169)

Keywords: suicide, suicide attempt, psychological suicide risk factors, social suicide risk factors

INTRODUCTION

Although suicidal behaviour (suicide and suicide attempt) is a complex, multi-causal human behaviour, associated with several risk and protective factors, untreated acute major psychiatric disorder (mostly depressive episode) is its most important risk factor. Up to 10-15% of patients with major mental/mood disorders die by suicide and about half of them make at least one suicide attempt during their lifetime. More than 90% of the suicide victims and suicide attempters have at least one Axis I (mostly untreated) major mental disorder, most frequently (unipolar or bipolar) major depressive episode (56-87%), substance use disorders (26-55%) and schizophrenia (6-13%). Comorbid anxiety and personality disorders are also frequently present, but they are rare as sole diagnoses. Suicidal behaviour in psychiatric/mood disorder patients occurs almost exclusively during an acute, severe, major illness/depressive episode, and practically never after clinical recovery suggesting that suicidal behaviour in patients with major psychiatric/mood disorders is a state - and severity-dependent phenomenon (Rihmer, 2007; Wasserman et al, 2012; Turecki and Brent, 2016; Weissman et al, 2021). In spite of this, suicidal behaviour is neither a normal response to the levels of stress experienced by most people, nor a standard consequence of major mental disorders, since the majority of mood disorder patients never take their own lives (and up to 50% of them never attempt). It clearly suggests that psychiatric disorder is a necessary but not enough condition for suicidal behaviour. Therefore, other – personality and psycho-social as well as demographic – risk factors should also play a significant contributory role and not only in the development of suicidal processes but also in the recognition and management of suicidal risk (Rihmer, 2007; Hawton et al, 2014; Isometsa, 2014; Turecki and Brent, 2016; Rihmer and Pompili, 2017; Zonda et al, 2019; Rihmer and Rutz, 2021). Since suicide and attempted suicide is very rare in the absence of current major mental disorders, primary (psychiatric) suicide risk factors, like current major depression, substance use disorder and schizophrenia particularly with prior suicide attempt, are the most powerful and clinically useful

predictors of suicide. However these major mental disorders increase suicide risk mostly if secondary (psychosocial, like impulsivity, adverse life events) and tertiary (demographic, like male gender, old age) suicide risk factors are also present (Rihmer, 2007; Rihmer and Pompili, 2017). In this paper we will shortly review the clinically significant psychological and social markers of suicidal behaviour that can help clinicians in recognising and managing suicide risk.

PYCHOLOGICAL FACTORS IN SUICIDAL BEHAVIOUR

Aggressive, impulsive personality features

It is well known for many decades that suicidality is also associated with certain personality features, such as aggressive, impulsive and hostile traits, hopelessness and pessimism, and the risk increases if these traits are present in combination (Mann et al, 1999). The relationship between these personality features and suicidal behaviour (attempt or completion) has been found across different nosological entities and this connection is also true of non-psychiatric populations (Zonda et al, 2019). Several studies have shown that suicidal behaviour was significantly associated with aggressive and impulsive traits and hopelessness in the case of major depression, bipolar, and some other psychiatric disorder (Mann et al, 1999; Zalsman et al, 2006; Oquendo et al, 2004; MacKinnon et al, 2005, Wassermaqn et al, 2012; Turecki and Brent, 2016). As for hopelessness (the normal variant of it is pessimism), it is much more than a personality trait; hopelessness is a symptom of severe major depression and in such patients decline in suicidal ideation is preceded by decline in overall depression severity and hopelessness (Sokero et al, 2006; Weismann et al, 2021). Impulsivity increases suicide risk when combined with depression, and even modest manic symptoms during bipolar depressive episodes are associated with a greater level of impulsivity and higher rates of suicide attempts. Impulsivity, a characteristic trait in bipolar patients, was associated with non-lethal suicide attempts in general samples, and in case of affective disorder patients it is also associated with severe suicide attempts and completed suicide. Impulsivity distinguishes suicidal and non-suicidal affective inpatients and controls and in bipolar patients, suicidal intent correlated with impulsivity even when controlling for aggression (Mann et al, 1999; Swann et al, 2005; Wasserman et al, 2012). Bipolar patients with a family history of suicidal behaviour and exposed to childhood physical and/or sexual abuse are at greater risk for suicide attempts (Carballo et al, 2008) and impulsivity seems to be the link between childhood abuse and suicidal behaviour (Braquehais et al, 2010). The well-known familial transmission of suicidal behaviour is mediated both by the higher risk of depression in the offsprings, and by impulsive aggression and hostility traits (Brodsky et al, 2008; Lopez-Castroman and Blasco-Fontecilla 2016; Turecki and Brent, 2016).

Suicidal behaviour is quite rare in the absence of major mood or substance-use disorders, but the comorbidity between mood and/or substance use disorder and personality disorder is quite common among suicidal persons. The most frequently associated personality disorders with suicidal behaviour are borderline, antisocial and narcissistic personality disorders. Impulsivity, aggression and hostility are common symptoms of these disorders, easily resulting in interpersonal conflict situations. The suicide risk is particularly high in the case of borderline personality disorder, due to frequent bipolar-borderline comorbidity and because impulsivity and affective instability are among the most common and persistent borderline traits (Rihmer, 2007; Turecki and Brent, 2016; Lopez-Castroman and Blasco-Fontecilla 2016). The strong relationship between verbal or physical aggression, including criminal behaviour, and suicidal behaviour is also supported by several epidemiological studies (O'Donnel et al, 2015).

The interaction between personality features/personality disorders and illness characteristics in the suicidal process is best formulated in the 'stress-diathesis model', which proposes that suicidal behaviour is determined not only by the stressor (acute major psychiatric illness or severe stressful life event), but also by a diathesis or predisposition (impulsive, aggressive, pessimistic personality traits, Mann et al, 1999; Wasserman et al, 2012). However, deficits in some cognitive function such as cognitive inhibition, fluency, problem-solving and decision making are also contributory factors (Hegedűs et al, 2018).

Specific affective temperaments

Only in the last decade has been recognised that affective temperaments, are also predisposing or risk factors for suicidal behaviour. Temperament carries the temporally stable biological "core" of personality and plays a role in establishing an individual's activity level, rhythms, moods and related cognitions as

well as their variability. Specific affective temperament types (depressive, cyclothymic, hyperthymic, irritable, and anxious) are the subsyndromal (trait-related) manifestations and commonly the precursors of minor and major mood disorders. Premorbid affective temperament-types have important role in the clinical evolution of minor and major mood episodes including the direction of the polarity and the symptom-formation of acute mood episodes. They also can significantly affect the long-term course and outcome including suicidality and other forms of self-destructive behaviours such as substance-use and eating disorders (Akiskal et al, 2005a, 2005b; Rihmer and Gonda, 2016). The concept of affective temperaments was turned into an instrument called as TEMPS-A (Temperament Evaluation of the Memphis, Pisa, Paris, and San Diego-Autoquestionnaire version) for assessing depressive, cyclothymic, hyperthymic irritable and anxious temperaments. This autoquestionnaire version requiring just simple "yes" or "no" answers contains 110 items (109 for males) (Akiskal et al. 2005b; Akiskal et al. 2005a).

While the different affective temperamental types (depressive, anxious, irritable, cyclothymic and hyperthymic) have all been shown to have some pattern of association with suicidal behaviour, results most consistently point to a key role for cyclothymic temperament for increasing the risk of suicide and suicide attempts not only in case of mood disorders, but also in other psychiatric illnesses and in healthy samples as well. In patients with major depression, cyclothymia/cyclothymic temperament (a chronic condition characterised by numerous hypomanic episodes and many periods of depressive symptoms) was significantly related to lifetime and current suicidal behaviour (attempts) and ideation both in adult and pediatric sample. More specifically, depressive, anxious, cyclothymic and irritable affective temperaments were markedly over-represented and hyperthymic temperament was under-represented among (nonviolent) suicide attempters, the majority of whom have experienced a current major depressive episode (Akiskal et al, 2003; Kochman et al, 2005; Pompili et al, 2008; 2012; Rihmer et al, 2009b; Vazquez et al, 2010).

Affective temperaments seem to be related to suicidal behaviour also in non-clinical samples. Investigating more than one thousand Austrian college students it has been found that lifetime suicidal ideation was associated with the depressive, cyclothymic, anxious temperament in both sexes and the irritable temperament in males and no relationship was found regarding hyperthymic temperament (Skala et al, 2012). In a sample of more than 1700 public school students in Portugal the history of prior self-harm was associated, in both genders, with a significant elevation on depressive, cyclothymic and irritable subscales of the TEMPS-A, and again, hyperthymic temperament was unrelated to self-harm (Guerreiro et al, 2013). However, marked affective temperaments that can be detected in about 15-20 % of the general population become suicide risk factors only during major depressive episode as cyclothymic/irritable temperaments in the frame of major depression can result in a mixed depressive episode that carries very high suicide risk (Rihmer 2007; Rihmer and Pompili, 2017). Suicide attempters with cyclothymic and irritable affective temperaments report significantly more frequently childhood physical and/or sexual abuse (Rihmer et al, 2009b) suggesting that besides impulsivity (Braquehais et al, 2010), cyclothymic or irritable temperaments are further mediating variables between these early negative life events and adult suicidal behaviour (Rihmer et al, 2009b).

Cyclothymic temperament may contribute to suicide risk on multiple levels. Cyclothymic temperament is associated with rapid mood fluctuations, mood reactivity and emotional instability contributing to extreme distress. Furthermore, cyclothymic temperament makes adapting to environmental changes and adversities difficult. Combined with other traits, cyclothymic temperament also contributes to a darker and more risk-taking impulsive side of hypomania, and this, as well as the instability associated with this affective temperament increases the risk of encountering stressful life events and comorbid conditions which play a role in triggering mood episodes and suicide. The temperamental reactivity embodied in cyclothymia also seems to be a stable trait constituting a basis for rapid shifts between inhibition and disinhibition providing the drive and energy for the suicidal act (Pompili et al, 2012). The relationship between affective temperaments and suicidal behaviour is, however, more complex than the simple additive effect of depressive personality components and current major depressive episode, as cyclothymic temperament seems to be also a contributor to suicidality in patients with other diagnosis than major depression, The presence of cyclothymic temperament increases suicide risk not only in affective disorders, but in other illnesses as well, such as obsessive-compulsive disorder (Hantouche et al, 2003). The central role of cyclothymic oscillations of mood, thinking and behaviour in the evolution of

suicidal process has been shown by studies reporting that history of rapid mood switching was associated with increased likelihood of prior suicidal ideation or attempt (MacKinnon et al, 2005), and variability of suicidal ideation was a significantly better predictor of prior suicide attempts than duration and intensity of ideation (Witte et al, 2005).

PSYCHO-SOCIAL FACTORS IN SUICIDAL BEHAVIOUR

Childhood abuse and bullying

Empirical studies suggest that all forms of childhood abuse, but primarily sexual, physical, and to a lesser extent emotional abuse, multiply the risk of suicide attempts (1.5-14x) (Carballo al, 2008; Turecki and Brent, 2016; Rihmer et al, 2009b; Wasserman et al, 2012; Angelakis et al, 2019). The risk of suicide attempts after sexual trauma in childhood, adolescence and later in adulthood is much higher than among non-abused persons. According to the interpersonal theory of suicidal behaviour, sexual and physical abuse results in a habituation to pain and a reduction in fear of death, thereby increasing the risk of suicide (Angelakis et al, 2019). Several studies show that childhood abuse or neglect is associated with hypothalamic-pituitary-adrenal axis dysregulation as well as altered stress reactivity and with disruptions in some immune system markers (Gonzalez, 2013; Turecki and Brent, 2016). The risk of suicide exists in males even if the affective, anxiety or behavioural symptoms associated with the abuse are not obvious (Hornor 2010). The following factors further increase the risk of suicide: severe, recurrent sexual abuse by a family member, alcohol, drug use, depression, isolation, anxiety, violent, aggressive behaviour (Rihmer at al, 2009b; Amitai and Apter 2012; Hornor 2010). Childhood bullying and victimization increase suicide risk. Among boys both bullies and victims of bullying are more likely to attempt suicide; conduct disorder is common among these individuals. In case of girls, victims are at increased risk of suicide, even if the associated depression and or behavioural disorder is attended (Amitai and Apter 2012).

Permanent unemployment, financial problems, low education

In spite of the fact that low education, financial problems and unemployment are mostly interrelated, they could be also independent risk factors for suicidal behaviour, particularly in the presence of major mental disorders (Almási et al, 2009; Reeves et al, 2012; Bálint et al, 2016; Turecki and Brent, 2016). Although the relationship between permanent unemployment and suicide behaviour is quite complex, mostly major psychiatric disorders (depression, substance-use disorder) are the main mediating variables between them (Blakely et al, 2003). Consistent with this is that epidemiological studies suggest that unemployment in the general population might be associated with suicidality only after 3-5 years of job loss, as depression, if develops, do not occur immediately after the loss of job (Fountoulakis et al, 2014). However, the relationship between suicide and permanent unemployment (and related financial problems) is bidirectional: protracted, untreated depression can lead to loss of job, and long-lasting unemployment can result in depression.

Loneliness, divorce, separation, living alone

The relationship between loneliness, divorce/separation and suicidal behaviour is also complex. Clinical and epidemiological studies consistently show that persons with divorce/separation and who are living alone or are isolated, are overrepresented in suicide victims and attempters. This is particularly true for young males and some studies suggest that separation might carry greater risk of suicide than divorce as the effect of divorce or separation differs by gender and age (Rihmer 2007; Almási et al, 2009; Wyder et al, 2009; Bálint et al, 2016; Turecki and Brent, 2016). Some of the contributing factors might be that interpersonal problems, marital conflicts and the rate of divorce/separation are markedly elevated in patients with major depression, substance-use disorders and particularly in the cases of bipolar disorder (Isometsa et al, 1995; Kessler et al, 1998).

Social, ethnic and sexual minorities

The risk of suicidal behaviour is increased in some social and ethnic minorities, including persons belonging to low social class and immigrants. As for immigrants, beside psychopathology and (related) selective migration language barriers, separation from family, poor financial background, worrying about family back home, loss of prior status and social network, low access to healthcare are also contributory factors. Interestingly, a positive correlation was found between suicidal behaviour and specific countries of origin (Wasserman et al, 2012; Forte et al, 2018).

Same-sexual oriented people as well as bisexuals and other sexual minorities including transgender persons and those who underwent sex reassignment surgery are also at elevated risk of suicide attempt and to lesser extent completed suicide. The elevated risk of suicidal behaviour of transgender persons do not further increase after sex reassignment (hormonal and/or surgical) therapy. In addition to major suicide risk factors (including elevated rate of mood and anxiety disorders), commonly present in these subpopulations, stigmatization, resulting in psychological discomfort are also contributory factor (Herrell et al 1999; Turecki and Brent, 2016; Branström and Pachankis 2020; Lynch et al, 2020; Dhejne et al, 2021; Wiepjes et al, 2020).

Acute psycho-social crisis, loss-events, grief

A crisis is an event or situation that causes overwhelming difficulty for the person concerned, when mental balance is disturbed. The resources available and the coping mechanisms are not sufficient to solve the crisis, but it is not possible to avoid either (Cherry 2019; Voros et al,2021). The crisis can affect many areas of life, such as being a victim of an accident or violence, occupational and financial difficulties, and specific or symbolic experiences of loss (Voros et al, 2021). The experience of losing a significant person, health, national or cultural affiliation, or imminent loss increases the possibility of suicide. Grief escalates the risk of suicide, especially in cases where the survivor currently suffers from major mental illness and has an extended need for dependence and the feeling of security is frustrated by the loss. On the other hand, however, grief can provoke first or recurrent episode of depression, or other mental disorders, that further increases the risk (Rihmer, 2007; Turecki and Brent, 2016). Among children and adolescents, parental illness, death, separation and divorce represent significant suicidal risk factors. Maternal loss is significantly more common among suicidal individuals than among non-suicidal ones. The younger the child is at the time of losing the parent, the greater the risk of suicide it carries (Lee and Jung, 2006). However, acute psycho-social stressors are commonly dependent on the victim's own behaviour, particularly in the case of bipolar I disorder (Isometsa et al, 1995). It may be that hypomanic and manic periods can easily lead to aggressive-impulsive behaviour, financial extravagance, or episodic promiscuity, thus generating several interpersonal conflicts, marital breakdown and new negative life events, all of which have a negative impact on the further course of the illness and could be contributor for suicidal behaviour.

Special professions

It has been repeatedly reported that suicide rates of physicians, particularly females, was much higher than those of the general population or other academics. Depression, bipolar disorder, substance-use disorders are often present among suicidal physicians who are more likely to blame themselves for their behavioural problems and they ask for professional help relatively infrequently. Studies also show that workers in some other occupations, including chemistry, farming, and law enforcement, may have elevated suicide rates (Shernhammer and Coldiz, 2004; Boxer et al, 1995). Of course, gun ownership (soldiers policemen, hunters, and others) and easy availability of highly lethal suicide methods are also important, socially amendable, suicide risk factors (Turecki and Brent, 2016; Studdert et al, 2020).

Lack of social protective factors and easy availability of high-lethality suicide methods

Epidemiological and clinical studies consistently show that good family, social, and medical support, as well as children at home, and low availability of lethal suicide methods have protective effect against all forms of suicidal behaviour (Heikkinen et al, 1993; Driver and Abed 2004; Mann et al, 2005; Almási et al, 2009; Wasserman et al, 2012; Kleiman and Lu, 2013; Bálint et al, 2014;2016; Studdert et al, 2020). In agreement with the original findings and theory of Emil Durkheim, the majority of the studies in the last century have found an inverse association between religiosity/spirituality and suicidal behaviour. However, most recent studies conducted in more and more secularized countries have produced mixed results. In spite of the fact, that religiosity is suicide protective factor in general (Rihmer, 2007; Zonda et al, 2019), the relationship between religion and suicidal behaviour is quite complex and can vary by age, sex, nature and level of religious involvement and ultimately by psychiatric diagnosis also involving alcohol and drug-use disorders (Dervic et al, 2004; Nelson et al, 2012. Lawrence et al, 2016). Finally it should be noted that a strong relationship between the day of birthday and the date of suicide in men in all age-groups has been also reported from Hungary (Zonda et al, 2019).

CONCLUSIONS

Suicide risk factors are addictive in their nature: the higher is the number of risk factors, the higher is the risk. However, psychological and social suicide risk factors alone, without any major mental disorder or severe acute psychosocial crisis have relatively low predictive value in the clinical practice, but they increase the risk markedly if some of them are present in a person with acute, severe psychopathology. Many psychiatric-medical suicide risk factors (eg. depression) as well as some of the psycho-social risk factors, mentioned above, are highly modifiable that, in addition to conventional treatments, clinicians should use in managing suicide risk in their patients. Considering these psycho-social suicide risk factors is particularly important in our present COVID-19 era, as in addition to biological aspects, the psychological and social consequences of this pandemic involve several adverse events and situations (from economic stress to death of a loved person) that can contribute to elevated psychiatric morbidity and suicidal behaviour (Sher, 2020; Serafini et al, 2020). We have found a 16% increase in suicide rate of Hungary (18% raise in males) in the first 10 months of COVID pandemic (Osváth et al, 2021).

Corresponding author: Zoltan Rihmer
National Institute of Mental Health,
Neurology and Neurosurgery, Budapest, Hungary
E-mail: rihmer.z@kronet.hu

REFERENCES

1. Akiskal HS, Hantouche EG, Allilaire JF. 2003. Bipolar II with and without cyclothymic temperament: "dark" and "sunny" expressions of soft bipolarity. J Affect Disord 73 (1-2):49-57.
2. Akiskal HS, Akiskal K, Allilaire JF, Azorin JM, Bourgeois ML, Sechter D, Fraud JP, Chatenet-Duchene L, Lancrenon S, Perugi G, Hantouche EG. 2005a. Validating affective temperaments in their subaffective and socially positive attributes: psychometric, clinical and familial data from a French national study. J Affect Disord 85 (1-2):29-36.
3. Akiskal HS, Akiskal KK, Haykal RF, Manning JS, Connor PD. 2005b. TEMPS-A: progress towards validation of a self-rated clinical version of the Temperament Evaluation of the Memphis, Pisa, Paris, and San Diego Autoquestionnaire. J Affect Disord 85 (1-2):3-16.
4. Almási K, Belső N, Kapur N, Webb R, Cooper J, Hadley S, Kerfoot M, Dunn G, Sótonyi P, Rihmer Z, Appleby L. 2009. Risk factors for suicide in Hungary: A case-control study. BMC Psychiatry 9: 45.
5. Amitai M, Apter A. 2012. Social Aspects of Suicidal Behaviour and Prevention in Early Life: A Review. Int J Environ Res Public Health 9, 985-994.
6. Angelakis I, Gilles EL, Panagioti M. 2019. Childhood maltreatment and adult suicidality: a comprehensive systematic review with metaanalysis. Psychol Med 49(7) 1057-1078.
7. Branström R, Pachankis JE. 2020. Reduction in mental helth treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. Am J Psychiatry 177: 727-734.
8. Braquehais MD, Oquendo MA, Baca-Garcia E, Sher L. 2010. Is impulsivity a link between childhood abuse and suicide? Compr Psychiatry 51 (2):121-129.
9. Bálint L, Döme P, Daróczi G, Gonda X, Rihmer Z. 2014. Investigation of the marked and long- standing a spatial inhomogeneity of the Hungarian suicide rate: a spatial regression approach. J Affect Disord 155: 180-185.
10. Bálint L, Osváth P, Rihmer Z, Döme P. 2016. Associations between marital and educational status and risk of suicide in Hungary. J Affect Disord 190: 777-783.
11. Blakely TA, Collings SCD, Atkinson J. 2003. Unemployment and suicide. Evidence for a causal association? J Epidemiol Community Health 57: 594-600.
12. Boxer PA, Burnett C, Swanson N. 1995. Suicide and occupation: A review of the literature. Occup Environ Med 37: 442-452.
13. Brodsky BS, Mann JJ, Stanley B, Tin A, Oquendo M, Birmaher B, Greenhill L, Kolko D, Zelazny J, Burke AK, Melhem NM, Brent D. 2008. Familial transmission of suicidal behaviour: Factors mediating the relationship between childhood abuse and offspring suicide attempts. J Clin Psychiatry 69: 584-596.
14. Carballo JJ., Harkavy-Friedman J., Bruke AK., Sher L., Baca-Garcia E., Sullivan GM., Grunebaum MF., Parsey R., Mann JJ., Oquendo MA. 2008. Family history of suicidal behaviour and early traumatic experiences: Additive effect on suicidality and course of bipolar illness? J Affect Disord 109: 57-63.
15. Cherry K. 2019. Psychological crisis types and causes. Verywellmind. Retrieved from https://www.verywellmind.com/what-is-a-crisis-2795061
16. Dervic K, Oquendo MA, Grunebaum MF, Ellis S, Burke AK. et al. 2004. Religious affiliation and suicide attempt. Am J Psychiatry 161: 2303-2308.
17. Dhejne C, Lichtenstein P, Boman M, Johanmsson ALV, Lagström N, Landén,M. 2011. Long-term follow-up of transsexual persons undergoing sex reassignment surgery: Cohort study in Sweden. PLoS ONE 6(2): e16885.
18. Driver K, Abed RT. 2004. Does having offspring reduce the risk of suicide in women? Int J Psychiatry Clin Pract 8: 25—29.
19. Forte A, Trobia F, Gualtieri F, Lamis D, Cardamone G, et al. 2018. Suicide risk among immigrants and ethnic minorities: A literature overview. Int J Environ Res Public Health 15 (7):1438.
20. Fountoulakis KN, Gonda X, Döme P, Theodorakis PN, Rihmer Z. 2014. Possible delayed effect of unemployment on suicidal rates: The case of Hungary. Ann Gen Psychiatry 13:12.
21. Gonzalez A. 2013. The impact of childhood maltreatment on biological systems: Implications for clinicall interventions. Pediatr Child Health 18 (8): 415-418.
22. Guerreiro DF, Sampaio D, Rihmer Z, Gonda X, Figueira ML 2013. Affective temperaments and self-harm in adolescents: a cross-sectional study from a community sample. J Affect Disord 151 (3):891-898.
23. Hantouche EG, Angst J, Demonfaucon C, Perugi G, Lancrenon S, Akiskal HS. 2003. Cyclothymic OCD: a distinct form? J Affect Disord 75 (1):1-10.

24. Hawton K., Saunders K., Topiwala A., & Haw, C. 2014. Psychiatric disorders in patients presenting to hospital following self-harm: A systematic review. J Affect Disord 151, 821-830.
25. Hegedűs KM, Szkkaliczki A, Gál BI, Andó B, Janka Z, Álmos PZ. 2018. Decision.making performance of depressed patients within 72 h following a suicide attempt. J Affect Disord 235:583-588.
26. Heikkinen M, Aro H, Lönnqvist J. 1993. Life events and social support in suicide. Suic Life-Threat Behav 23: 343-358.
27. Herrel R, Goldberg J, True WR, Ramakrishnan V, Lyons M, Eisen S. Tsuang MT. 1999. Sexual orientation and suicidality. A co-twin control study in adult men. Arch Gen Psychiatry 56: 867-874.
28. Hornor G. 2010. Child Sexual Abuse: Consequences and Implications. J Pediatr Health Care 24 (6):358-364.
29. Isometsa E. 2014. Suicidal behaviour in mood disorders- who, when, and why? Canad J Psychiatry 59: 120-130.
30. Isometsa E, Heikkinen M, Henriksson M, Aro H, Lönnqvist J. 1995. Recent life events and completed suicide in bipolar affective disorder: A comparison with major depressive disorder in Finland. J Affect Disord 33 (2): 99-106
31. Kessler RC, Walters EE, Forthofer MS. 1998. The social consequences of psychiatric disorders, III. Probability of marital instability. Am J Psychiatry 155: 1092-1096.
32. Kleiman EM, Lu RT. 2013. Social support as a protective factor in suicide: Findings from two nationally representative samples. J Affect Disord 150: 540-545.
33. Kochman FJ, Hantouche EG, Ferrari P, Lancrenon S, Bayart D, Akiskal HS. 2005. Cyclothymic temperament as a prospective predictor of bipolarity and suicidality in children and adolescents with major depressive disorder. J Affect Disord 85 (1-2):181-189.
34. Lawrence RE, Brent D, Mann JJ, Burke AK, Grunebaum MF. et al. 2016. Religion as a risk factor for suicide attempt and suicide ideation among depressed patients. J Nerv Ment Dis 204; 845-850.
35. Lee SI, Jung HY. 2006. Psychosocial Risk Factors for Suicide. Psychiatry Invest 3(2):15-22.
36. Lopez-Castroman, J., & Blasco-Fontecilla, H. 2016. How to deal with personality in suicidal behaviour? In P. Courtet (Ed.), Understanding suicide: From diagnosis to personalized treatment 211–224. Springer International Publishing/Springer Nature.
37. Lynch KE, Gatsby E, Viernes B, Schilep KC, Whitcomb BW, et al. 2020. Evaluation of suicide mortalitya among sexual minority veterans from 2000-2017. JAMA Nework Open, 2020;3(12) e203157.
38. MacKinnon DF, Potash JB, McMahon FJ, Simpson SG, Depaulo JR, Jr., Zandi PP. 2005. National Institutes of Mental Health Bipolar Disorder Genetics I. Rapid mood switching and suicidality in familial bipolar disorder. Bipolar Disord 7 (5):441-448.
39. Mann, J. J., Waternaux, C., Haas, G. L., & Malone, K. M. 1999. Toward a clinical model of suicidal behaviour in psychiatric patients. Am J Psychiatry 156, 181-189.
40. Mann J. J., Apter A., Bartolote J., Beautrais A., Currier D., et al, 2005. Suicide prevention strategies: A systematic review. JAMA, 2005, 294: 2064-2074.
41. Nelson G, Hanna R, Houri A, Klimes-Dougan B. 2012. Protective functions of religious traditions for suicide risk. Suicidology Online, 3: 59-71.
42. O'Donnel O, House A, Waterman M. 2015, The co-occurrence of aggression and self-harm: Systematic literature review. J Affect Disord 175: 325-350.
43. Oquendo MA, Perez-Rodriguez MM, Poh E, Sullivan G, Burke AK, Sublette ME, Galfalvy H. 2014. Life events: a complex role in the timing of suicidal behaviour among depressed patients. Mol Psychiatry 19, 902-909.
44. Osváth P, Bálint L, Németh A, Kapitány B, Rihmer Z, Döme P. 2021. A magyarországi öngyilkossági ha-lálozás változásai a COVID-19-járvány első évében. Orv Hetil 162: 1631-1636
45. Pompili M, Rihmer Z, Akiskal HS, Innamorati M, Iliceto P, Akiskal KK, Lester D, Narciso V, Ferracuti S, Tatarelli R, De Pisa E, Girardi P. 2008.Temperament and personality dimensions in suicidal and nonsuicidal psychiatric inpatients. Psychopathology 41 (5):313-321.
46. Pompili M, Innamorati M, Rihmer Z, Gonda X, Serafini G, Akiskal H, Amore M, Niolu C, Sher L, Tatarelli R, Perugi G, Girardi P. 2012. Cyclothymic-depressive-anxious temperament pattern is related to suicide risk in 346 patients with major mood disorders. J Affect Disord 136 (3):405-411.
47. Reeves A, Stuckler D, McKee M, Gunnell D, Chang SS, Basu S. 2012. Increase in state suicide rates in the USA during economic recession. Lancet 380:1813-1814.
48. Rihmer Z. 2007. Suicide risk in mood disorders. Curr Opin Psychiatry, 20, 17-22.
49. Rihmer A, Rozsa S, Rihmer Z, Gonda X, Akiskal KK, Akiskal HS. 2009a. Affective temperaments, as measured by TEMPS-A, among nonviolent suicide attempters. J Affect Disord 116 (12):18-22.
50. Rihmer A, Szilágyi S, Rózsa S, Gonda X, Faludi G, Rihmer Z. 2009b. A gyermekkori abúzusok szerepe a felnőttkori szuicid magatartás kialakulásában. Neuropsychopharmacologia Hungarica 11:237-246.
51. Rihmer Z, Gonda X. 2016. Temperament in suicidal behaviour. In.: Understanding suicide. (Ed.: Courtet P). Springer 43-51.
52. Rihmer Z, Pompili M. 2017. Mood disorders: Suicidal behaviour. In: Kaplan and Sadock's Comprehensive Textbook of Psychiatry, 10th edition, (Eds.: Sadock B.J., Sadock V.A., Ruiz P.), Lippincott Williams and Wilkins, Philadelphia, PA, 1667-1675.
53. Rihmer Z, Rutz W. 2021. Early detection and management of suicidal patients in primary care. In. Oxford Textbook of Suicidology and Suicide Prevention, (Eds: Wasserman, D, Wasserman C.), Oxford University Press, New York, pp. 437-445.
54. Schernhammer ES, Coldiz GA. 2004. Suicide rates among physicians: A quantitative and gender Assessment (Meta-analysis). Amer J Psychiat 161: 2295-2302.
55. Serafini G, Rihmer Z, Amerio A, Aguglia A, Amore M. 2020. COVID-19 infection and mental disorders: A Call for action to enhance protection and break down barriers. Psychiat Hung, 35 (3): 245-246.
56. Sher L. The impact of COVID-19 pandemic on suicide rates. 2020. QJM: An International Journal of Medicine, 113 (10): 707-712.
57. Skala K, Kapusta ND, Schlaff G, Unseld M, Erfurth A, Lesch OM, Walter H, Akiskal KK, Akiskal HS. 2012, Suicidal ideation and temperament: an investigation among college students. J Affect Disord 141 (2-3):399-405.
58. Sokero P, Erola M, Rytsala H, Melartin T, Leskela U, et al. 2006. Decline in suicidal ideation amog patients with MDD is preceded by decline in depression and hopelessness. J Affect Disord 95: 95-102.
59. Studdert DM, Zhang Y, Swanson S, Prince L, Rodder J. et al. 2020. Handgun ownership and suicide in California. N Engl J Med 382: 2220-2229.

60. Swann AC, Moeller FG, Steinberg JL, Schneider L, Barratt ES, & Dougherty DM. 2007. Manic symptoms and impulsivity during bipolar depressive episode. Bipolar Disord 9, 206-212.
61. Turecki G, Brent DA. 2016. Suicide and suicidal behaviour. Lancet 387: 1227-1239.
62. Vazquez GH, Gonda X, Zaratiegui R, Lorenzo LS, Akiskal K, Akiskal HS. 2010. Hyperthymic temperament may protect against suicidal ideation. J Affect Disord 127 (1-3):38-42.
63. Voros V, Tenyi T, Nagy A, Fekete S, Osvath P. 2021.Crisis Concept Re-loaded? – The Recetntly Described Suicide- Specific Syndromes May Help to Better Understand Suicidal Behaviour and Assess Imminent Suicide Risk More Effectively. Front Psychiatry.
64. Wasserman D, Rihmer Z, Rajescu D, Sarchiapone M, Sokolowski, et al. 2012. The European Psychiatric Association (EPA) guadance on suicide treatment and prevention. Eur. Psychiatry, 27: 129-141.
65. Weissman CR, Hadas I, Yu D, Jones B, Kong D, Muslant BH, Blumberger DM, Daskalakis ZJ. 2021. Predictors of change in suicidal ideation across treatment phases of major depressive disorder: Analysis of the STAR*D data. Neuropsychopharmacology, 46; 1293-1299.
66. Wiepjes CM, den Heijer M, Bremmer MA, Nota NM, de Blok CJM et al. 2020. Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972-2017). Acta Psychiat Scand 141: 486-491.
67. Witte TK, Fitzpatrick KK, Joiner TE, Jr., Schmidt NB. 2005. Variability in suicidal ideation: a better predictor of suicide attempts than intensity or duration of ideation? J Affect Disord 88 (2):131-136.
68. Wyder M, Ward M, De Leo D. 2009. Separation as a suicidecrisk factor. J Affect Disord 116:208-213.
69. Zalsman G, Braun M, Arendt M, Grunebaum MF, Sher L, Burke AK, ... Oquendo MA. 2006. A comparison of the medical lethality of suicide attempts in bipolar and major depressive disorder. Bipol Disord 8, 558-565.
70. Zonda T, Paksi B, Bozsonyi K, Veres E. (2019). Munkacsoportunk 40 éves tevékenysége (1979-2019) a hazai és nemzetközi szuicidológia szolgálatában. Neuropsychopharmacol Hung, 21: 127-135.

Az öngyilkosság pszichoszociális összefüggései

Annak ellenére, hogy az öngyilkos magatartás nagyon ritka aktuálisan fennálló, major pszichiátriai betegség nélkül, a pszichiátriai betegek döntő többsége mégsem öngyilkosságban hal meg. Ebből következik, hogy mint a szakirodalmi adatok mutatják, egyéb (pszichológiai és szociális) tényezők szintén szerepet játszanak. Cikkünkben röviden összefoglaljuk az öngyilkos magatartás pszichológiai és társas korrelátumait, amelyek segítik a klinikust a szuicid rizikó felismerésében és a páciensek ellátásában.

Kulcsszavak: öngyilkosság, öngyilkossági kísérlet, pszichológiai szuicid rizikófaktorok, szociális szuicid rizikófaktorok