





Risk factors of SUICIDE

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PSYCHIATRIC DISORDERS AND SUICIDE

- ▶ Risk factors for suicide are both individual and familial. Suicidal behaviors aggregate in families, and family history of suicidal behaviors is an independent risk factor for suicide attempts and completed suicides.
- ▶ The presence of current and lifetime psychiatric diagnoses like **major depressive disorder (MDD), bipolar disorders, anxiety disorders, alcohol and substance misuse, schizophrenia, eating disorders, personality disorders, different types of trauma, chronic somatic disorders**, and current stressful life events are significant risk factors for suicidal behaviors.

PSYCHIATRIC DISORDERS AND SUICIDE

- ▶ In the context of suicide, there is a growing body of evidence showing that exposure to early-life maltreatment can affect molecular mechanisms involved in the regulation of behavior through **methylation** and **histone** modification, supposed to induce behavioral deviations during the early development, and possibly later in life, affect genes involved in crucial neural processes. This mechanism is called **epigenetics**. Childhood abuse and other detrimental environmental factors seem to target the epigenetic regulation of genes involved in the synthesis of neurotrophic factors and neurotransmission.

- ▶ MDD is strongly linked with suicide, especially if long-term comorbidity and acute negative life events are present.
- ▶ The clinical picture is characterized by symptoms like weight loss or gain, sleep disturbances, fatigue, concentration difficulties, changes in psychomotor capabilities, feelings of worthlessness, guilt, and recurrent thoughts of severe suicidal ideation with suicidal plans.
- ▶ In the melancholic type of MDD, despondency, despair, irrational guilt, and emptiness are profound symptoms.

- ▶ Patients diagnosed with dysthymia (persistent depressive disorder) complain of irrational patterns of negative thinking and chronic dysphoria.
- ▶ Depressed suicidal patients have similar risk factors for suicide as patients with other psychiatric diagnosis, namely, living alone, being unmarried, unemployed, and a history of previous suicide attempts. Recurrent MDDs are robust precipitants of suicidal behaviors. Physical illnesses also increase the risk of suicide and attempted suicide in depressed patients, especially in the elderly population.

- ▶ The most common comorbidity for affective disorders in suicidal behavior is **alcohol and other substance use, multiple physical impairments, and personality disorders**. Independently of the direction concerning the link between different forms of depression and comorbidity, it is important from the clinical point of view to treat all disorders.
- ▶ The risk of suicide varies between the different subtypes of depression.
- ▶ Affective temperaments like **cyclothymic** disorder and **anxiousness** are associated with both suicide attempts and suicide. Such temperaments, along with irritability and rapid mood switches, are important contributors in triggering suicidal acts.

Bipolar Disorders

- ▶ Bipolar disorders constitute a high-risk group for suicide and attempted suicide. The majority of persons with bipolar disorders commit suicide when they are in a **major depressive episode** or in a **mixed depressive state**. Suicide during the manic phase is **rare**. The prevalence of suicide attempts is **similar** in both type I and type II bipolar disorders.
- ▶ Comorbidity of substance use disorders, depression, and anxiety is almost always present in persons who committed suicide. Effective pharmacological treatment supported by psychological techniques is the foremost strategy to prevent completed suicide.

Alcohol and Substance Use Disorders

- ▶ Excessive alcohol and other substance misuse leading to significant impairment and distress are well-recognized conditions for an increased risk of suicidal behaviors. Comorbidity with personality disorders magnifies the risk of suicide. Suicide mortality is highest among drug users and lower, but still high, among persons with alcohol use disorders, as well as more prevalent among males compared to females.

Alcohol and Substance Use Disorders

- ▶ Alcohol and other substance misuse increase aggressivity, impulsivity, and cause deterioration in cognitive capacity and flexibility to find constructive coping strategies. Suicidal alcohol misusers, however, have a fairly good psychosocial coping ability, which could make their suicide appear more astounding. Good psychosocial functioning could potentially explain why they did not seek treatment or receive attention from significant others to motivate them for treatment.

Alcohol and Substance Use Disorders

- ▶ Triggers for suicidal behaviors in persons with alcohol and substance use disorders are losses of important relationships, work, economical security, and self-esteem. The more dependence the substance users' experience in their relationships, the greater the risk that separation may push them into self-destructive acts.

Anxiety Disorders

- ▶ Anxiety as a risk factor for suicide has been neglected for a long time.
- ▶ There are many ways to assess the severity of anxiety, and it is important that suicidal psychiatric patients, especially those with mood disorders, substance use disorders, and in psychotic states are assessed for the presence of severe anxiety and treated for it

Schizophrenia and Other Psychotic Disorders

- ▶ In the schizophrenic population, estimates show that approximately 5 to 10 percent die due to suicide.
- ▶ Moderate-to-severe depression is one of the most frequent features of schizophrenic patients who commit suicide. Schizophrenics who commit suicide usually have poorer treatment compliance, not seldom due to the side effects of antipsychotic medication like **akathisia**. Suicides occur after abrupt discontinuation of medication.

Schizophrenia and Other Psychotic Disorders

- ▶ Negative attitudes toward medication and treatment are generally high in both schizophrenic and suicidal patients with other psychiatric diagnosis. **Poor treatment compliance, social isolation,** and **increased expectation of good performance** from others and from patients themselves, are risk factors for suicide in schizophrenics.

Schizophrenia and Other Psychotic Disorders

- ▶ For a long time, there has been controversy surrounding the question whether schizophrenics commit suicide during the intense and frightening psychotic activity or during periods of remission.
- ▶ Studies found that command hallucinations are **rare** among completed suicides.

Schizophrenia and Other Psychotic Disorders

- ▶ On the contrary, a good premorbid functioning and higher level of education may predispose to suicide in younger schizophrenic patients, as they experience more disruption of performance and may have more difficulty to accept chronic illness and prospects of mental deterioration than older schizophrenic patients. When giving information about the diagnosis, course of illness, and treatment, one should be aware that it is a risk situation for suicide.

Eating and Adjustment Disorders

- ▶ Patients with anorexia nervosa have an increased suicide risk, thus suicide risk assessment should be included in a comprehensive clinical evaluation.
- ▶ Patients with bulimia nervosa and binge eating disorders also have an increased risk of suicidal behaviors.

Eating and Adjustment Disorders

- ▶ A high comorbidity of mental illnesses like MDD, bipolar disorder, anxiety disorders, and borderline personality disorders (BPDs) among persons who are underweight as well as overweight is to a great extent responsible for the high suicide risk in all eating disorders.
- ▶ Treatment is often complicated and requires behavioral therapy combined with medication and supportive measures. **Low body mass index (BMI) and low serum cholesterol** have been shown to be associated with a higher risk of attempted and completed suicide.

Risk factors for suicide in prisons: a systematic review and meta-analysis, www.thelancet.com/public-health Vol 6 March 2021

- ▶ **Methods** We searched five bibliographic databases for articles published between Jan 1, 2006, and Aug 13, 2020, and one database for articles published between Jan 1, 1973, and Aug 13, 2020. Eligible studies reported risk factors in individuals who died by suicide while in prison and in controls from the general prison population.
- ▶ **Findings** We identified 8041 records through our searches, and used 77 eligible studies from 27 countries, including 35 351 suicides, in the main analysis. The strongest clinical factors associated with suicide were suicidal ideation during the current period in prison, a history of attempted suicide ,and current psychiatric diagnosis . Institutional factors associated with suicide included occupation of a single cell and having no social visits .Criminological factors included remand status , serving a life sentence , and being convicted of a violent offence, in particular homicide .

A systematic review of suicidal behaviour in men: A narrative synthesis of risk factors, Social Science & Medicine (2021)

- ▶ *Results:* An initial 601 studies were identified. Following the inclusion and exclusion criteria, there were 105 eligible studies (62 prospective and 43 retrospective) identified. Overall, the risk factors with the strongest evidence predicting suicidal behaviour in men were alcohol and/or drug use/dependence; being unmarried, single, divorced, or widowed; and having a diagnosis of depression. In the prospective studies, the most consistent evidence was for sociodemographic factors (19 risk factors), mental health/psychiatric illness (16 risk factors), physical health/illness (13 risk factors), and negative life events/trauma (11 risk factors). There were a small number of psychological factors (6 factors) and characteristics of suicidal behaviour (3 factors) identified. The findings from the retrospective studies provided further evidence for the risk factors identified in the prospective studies.

A systematic review of suicidal behaviour in men: A narrative synthesis of risk factors, Social Science & Medicine (2021)

- ▶ *Psychological factors – personality and individual differences*
Study found that both impulsive aggression and non-impulsive aggression discriminated between male depressed suicide completers and controls. The same effect was not replicated in women. Study also found that depressed male suicide cases had a higher likelihood of being characterised as “highly impulsive” compared to depressed living participants (controls).

Psychological autopsy study and risk factors for suicide in Muslim countries, Health Sci Rep. 2021

- ▶ Results: Out of the Muslim countries, only eight psychological autopsy studies were identified in five countries (Bangladesh, Indonesia, Iran, Pakistan, and Turkey). Six studies adopted a case-control study design, and all were carried out in urban settings. The prevalence of psychiatric disorders among case-control studies varied from 52.8% in Turkey to 96% in Pakistan. Psychiatric illness, self-harm, and stressful life events were the commonly replicated risk factors for suicide across studies.
- ▶ Conclusions: Psychological autopsy studies have been conducted only in five Muslim countries revealing that the risk factor for suicide is certainly under-researched in the incumbent countries. This review identified a similar list of risk factors for suicide, namely, psychiatric disorder, past non-fatal attempts, and adverse life events compared to the Western countries even though the rate varies.

Systematic review of risk and protective factors for suicidal and self-harm behaviors among children and adolescents involved with cyberbullying, Preventive Medicine (2021)

- ▶ Four bibliographic databases were explored and references in included articles were searched. We identified 727 articles and retained 66 that met inclusion criteria. Research has identified multiple risk factors which have been associated with increased suicide risk in general (mental health problems, substance abuse, loneliness, stress, sexual orientation/gender identity issues and violent behaviors). Others risk factors more specific to cyberbullying were: Autism Spectrum Disorder, Intellectual and Developmental Disorders, obesity, having asthma and severity of cyberbullying. Fewer studies concern protective factors. School connectedness, restrictive style of parenting, parental support, life satisfaction, having a healthy diet, personal skills and having family dinners were associated with less risk of suicidal and self-harm behaviors following cyberbullying. These protective factors suggest prevention strategies to reduce the impacts of cyberbullying by teaching better personal skills, promoting school social connections and proposing family interventions.

Suicidal behaviour in older age: A , Neuroscience and Biobehavioral Reviews (2021) systematic review of risk factors associated to suicide attempts and completed suicides

- ▶ From the 39 population-based studies selected in six different databases until February 15, 2021, we analyzed the most frequent 28 risk factors for suicidal behaviour. The risk factors more associated to suicide attempts than other variables frequently related to suicidal behavior in older age were: depressive disorders, methods employed to self-harm (particularly poisoning), and psychotropic drug utilization followed by psychological factors and disability. Moreover, male sex, violent methods to self-harm, any psychiatric disorder (depression, anxiety and bipolar disorders), a poor medical condition, stressors/bereavement, and living alone appeared to be more significant for predicting completed suicides in late life. In older age, efforts for suicide prevention should be based on strategies to assess and treat psychiatric disorders along with psychological interventions, particularly in males.

Risk factors for suicide in individuals with cancer: an integrative literature review, Rev Bras Enferm. 2021

- ▶ **Results:** eighteen articles were selected. Lung, bladder and colorectal cancers are the types of highest risk for suicide. Male, white and over 60 years of age are demographic factors with higher risk for suicide in individuals with cancer.
- ▶ **Conclusion:** this review made it possible to verify that cancer may be a risk factor for suicide. This evidence can be useful for planning preventive actions in order to reduce the risk of suicide.

Rates and risk factors for suicidal ideation, suicide attempts and suicide deaths in persons with HIV: a systematic review and meta-analysis, *General Psychiatry* 2021

- ▶ Results A total of 185 199 PLWHA were identified from 40 studies (12 cohorts, 27 cross-sectional and 1 nested case-control). The overall incidence of suicide completion in PLWHA was 10.2/1000 persons, translating to **100-fold higher** suicide deaths than the global general population rate of 0.11/1000 persons. The lifetime prevalence of suicide attempts was 158.3/1000 persons and of suicidal ideation was 228.3/1000 persons. Meta-regression revealed that for every 10-percentage point increase in the proportion of people living with HIV with advanced disease (AIDS), the risk of suicide completion increased by 34 per 1000 persons. The quality of evidence by Grading of Recommendations, Assessment, Development and Evaluations for the suicide deaths was graded as 'moderate' quality.
- ▶ Conclusions The risk of suicide death is 100-fold higher in people living with HIV than in the general population. Lifetime incidence of suicidal ideation and attempts are substantially high. Suicide risk assessments should be a priority in PLWHA, especially for those with more advanced disease.

Suicide Risk , NCBI Bookshelf. A service of the National Library of Medicine, National Institutes of Health. 2021 Jan

➤ **Suicide-related Characteristics :**

- Individuals who are suicidal have a number of characteristics, including the following:
 - A preoccupation with death
 - A sense of isolation and withdrawal
 - Few friends or family members
 - An emotional distance from others

Suicide Risk , NCBI Bookshelf. A service of the National Library of Medicine, National Institutes of Health. 2021 Jan

➤ **Suicide-related Characteristics :**

- Distraction and lack of humor - They often seem to be "in their own world" and lack a sense of humor(anhedonia)
- Focus on the past - They dwell in past losses and defeats and anticipate no future; they voice the notion that others and the world would be better off without them.
- Haunted and dominated by hopelessness and helplessness - They are without hope and therefore cannot foresee things ever improving.

