Suicidal Behavior in Children and Adolescents

Arman Masoudi

Child and Adolescent Psychiatrist

Babol University of Medical Sciences

Definitions

- The most currently accepted definitions of different types of suicide-related behaviors are the **Columbia Classification Algorithm for Suicide Assessment** (**CCASA**):

1-Suicidal ideation: Thoughts of death without actually engaging in the behavior; can range from "passive," in which the person thinks about wanting to be dead, to active thoughts about killing oneself.

2-Suicide attempt: A potentially self-injurious behavior with some evident intent to die (may be inferred from the behavior)

3-Completed suicide: Suicide attempt that results in death

Definitions

4-Aborted attempt: The person begins to make a suicide attempt but stops himself or herself prior to experiencing injury

5-Interrupted attempt: The person begins to make a suicide attempt but is interrupted by another person or circumstance prior to experiencing injury

6-Nonsuicidal self-injurious behavior: A self-injurious behavior performed without intent to die (other intent may be,for example, to relieve distress, effect change in others or the environment)

Epidemiology

- Suicide is the second leading cause of death for young people between the ages of 10 and 24 with over 140,000 young people taking their own life each year worldwide.

- Of concern is the large increase in rates of suicide death and suicide-related behaviors observed among children and youth in the last decade

Characteristics

- **AGE:**

❑ The rates of attempted and completed suicide **increase dramatically with age throughout childhood into adolescence**, Various explanations including:

1-elevated risk for psychopathology during adolescence,

2-increased cognitive capacity to prepare and execute a suicide plan,

3- decreased supervision with age.

❑ Although prepubertal children do endorse suicidal ideation, their cognitive immaturity appears to limit their ability to plan and execute lethal suicide attempts.

❑ suicidal ideation is **rare before age 10 years**(less than 1%)

Characteristics

- **Gender and Sexual Orientation:**
- The rate of **completed suicide** among youth is significantly higher for males than females(ratio of nearly 5 to 1)
- females endorse higher rates of **suicidal ideation** and have higher **suicide attempt** rates than males.

- The higher rate of completed suicide among male youth may be attributable to higher rates of associated risk factors, including:

1-substance use and

2- antisocial behaviors and

3- the tendency for males to employ more violent and lethal means of attempting suicide.

- As compared with heterosexual youth, sexual minority youth are at greater risk of attempted suicide and suicidal ideation

Characteristics

- **Socioeconomic Status:**

increased suicide risk is associated with lower socioeconomic status.

Risk Factors

1-Suicidal Ideation:

- Approximately 33% of youth with suicidal ideation go on to make a **suicide plan**;
- Similarly, of the 33% of youth whose suicidal ideation progresses to attempt, 86.1% will make the **attempt** within 1 year of ideation onset

Risk Factors

2-Previous Suicidal Behavior:

- The strongest predictor of future suicidal behavior is a history of suicidal behavior

- adolescent suicide attempters a reattempt rate within 1 year of 6.8% in **first-time attempters** and 24.6% in those with a history of **attempts**.

- the greatest risk period for reattempt occurring within 3 months of the initial attempt

- The period immediately following discharge from an inpatient psychiatric unit appears to be associated with particularly high risk

Risk Factors

- Youth with a history of attempting suicide using methods high in medical lethality, such as **hanging**, **shooting**, or **jumping**, are at especially high risk for eventual completed suicide

- it is not necessarily the case that an attempt of low lethality reflects low suicidal intent,particularly among younger children who may overestimate the lethality of means.

Risk Factors

3-Availability of Lethal Means:

- nearly 45% of young people who completed suicide in the United States died by firearm

- If a loaded gun is in the home, it is highly likely to be selected as a means of suicide.

- a loaded gun in the home was associated with a thirty-fold increased risk for completed suicide, even among youth with no apparent psychopathology

- Thus, **assessment** of both presence and storage/accessibility of firearms and ammunition in the homes of young people is recommended.

Risk Factors

4-Psychiatric Disorders:

- majority—nearly **90%—**of youth who **die by suicide** have evidence of serious psychopathology.
- Youth who **attempt** suicide also demonstrate high rates of psychopathology(**96%)**.

- Mood disorders convey the most potent risk, with more than 80% of attempters and 60% of completers meeting criteria for at least one major mood disorder.

- Other psychiatric conditions frequently associated with youth suicide and suicide attempt include:

  disruptive, anxiety, and substance use disorders.

❖ Comorbidity is the rule rather than the exception among youth who attem.pt and complete suicide.

Risk Factors

5-Psychological Factors:

- **impulsive aggression** in response to frustration or provocation

- **Hopelessness** also correlates strongly with suicidal intent and predicts risk for reattempt and completed suicide beyond its association with depression
- personality traits:

- **neuroticism**—*the tendency to experience prolonged and severe* negative affect in response to stress—has repeatedly been associated with suicide attempts in youth.

-**perfectionism** associated with suicide attempts in youth

Risk Factors

6-Medical Disorders:

- **Chronic medical conditions** affecting the **central nervous system** (e.g., epilepsy, migraine) and those involving **inflammation** (e.g., asthma, inflammatory bowel disease) are associated with increased risk for suicidal ideation and behavior in pediatric populations.

Risk Factors

7-Family Factors:

- both environmental and genetic mechanisms for the familial transmission of suicidal behavior, and suicidal behavior is transmitted in families distinct from its association with familial psychiatric illness.

- The first-degree relatives of adolescent suicide attempters and completers exhibit a suicide attempt rate 2-6 times higher than that found in the general population, even after controlling for higher rates of psychopathology

Risk Factors

- Greater familial loading has been found to be specifically associated with earlier age at onset of suicidal behavior in off-spring, suggesting that early onset suicidality may be a particularly **familial** form that is mediated by **impulsive aggression.**

- The **family environments** of suicide attempters are characterized by high levels of discord and violence and less supportive and more conflictual than those of non-attempters.

- conversely, a supportive and warm parent-child relationship can buffer against suicidal behavior in high-risk adolescents .

- physical and sexual abuse and parental loss or absence have a potent association with attempted and completed suicide in youth.

Assessment

- Suicidal ideation should be assessed according to both severity (intent) and pervasiveness (frequency and intensity).

- Suicidal ideation characterized by a **high degree of severity** and **pervasiveness** is associated with greater likelihood of suicide attempt in adolescents.

- In addition, prior suicidal behavior should be carefully reviewed

Assessment

1-Suicidal Intent:

- Suicidal intent is the extent to which the individual wishes to die.

- Given findings that adolescents may disclose suicidal ideation on self-report ratings but deny this information during interviews ,assessment of suicidal risk should incorporate both means of assessment.

Assessment

- **With regard to <u>suicidal intent</u>, 4 components should be explored:**

1-belief about intent (i.e., the extent to which the individual is wishing to die)

2-preparatory behavior (e.g., giving away prized possessions, writing a suicide note)

3-prevention of discovery (i.e., planning the attempt so that rescue is unlikely)

4-communication of suicidal intent.

- High intent—as evidenced by expressing a wish to die, planning the attempt ahead of time, timing the attempt to avoid detection, and confiding suicide plans prior to the attempt—is associated with **recurrent suicide attempts** and with **suicide completion**.

Assessment

2-Suicide Plan and Access to Means:

- Assessment should include inquiry regarding **specific plans** for inflicting self-harm, as well as **access to means** considered.

Assessment

3-Medical Lethality:

- Suicide attempts of high medical lethality (e.g., **hanging**, **shooting**) are frequently characterized by high suicidal intent, and individuals who use more medically lethal means are at higher risk to complete suicide.
- However, an **impulsive attempter** with **relatively low intent** but **ready access to lethal means** may also engage in a medically serious and even fatal attempt.
- It is important to **differentiate nonsuicidal self-injurious behavior(NSSI) from suicide attempt** by expressly inquiring about intent.
- Given that the **risk factors** for NSSI and suicidal behavior **overlap**, many youth engage in both behaviors, and

  therefore the presence of one should alert the clinician to inquire about the other.

Assessment

4-Precipitants:

- The most common precipitant for adolescent suicidal behavior is **interpersonal conflict** or **loss**, most often involving a **parent** or **a romantic relationship**.

- **Legal** and **disciplinary problems** also frequently precipitate suicidal behavior, particularly among youth with **conduct disorder** and **substance abuse**.

- Precipitants that are **chronic** and **ongoing**, especially recurrent physical or sexual abuse, are associated with poorer outcomes, including recurrence of suicidal behavior and even subsequent completion

Assessment

5-Motivation:

- Motivation is the reason the individual cites for his or her suicidality.
- Individuals with **high suicidal intent** indicate that their primary motivation is either to **die** or to **permanently escape an**
- **emotionally painful situation**, and these youth are at elevated risk for reattempt.
- Many youth who attempt suicide report they are motivated by the **desire to influencen others** or to **communicate a feeling**.

- Understanding the motivation for the suicide attempt has important implications for treatment, as intervention may focus on helping youth explicitly identify their needs and find less dangerous ways to get their needs met.

Treatment (Clinical Management)

1-Safety Plans:

Safety planning is considered best practice for suicide prevention with at-risk individuals.

- safety plan involves working with the patient and family to collaboratively create **a list of strategies that the patient agrees to use when a suicidal crisis occurs.**

- The **first step** in safety planning is **elimination of the availability of lethal means**.

- Next, an agreement with the adolescent is negotiated whereby he or she **agrees to some action in the event of suicidal thoughts and/or urges**.

Treatment (Clinical Management)

- Such actions may include implementing coping skills and contacting a responsible adult and/or a professional or crisis line.
- Next, triggers and warning signs (including cognitive, emotional, and behavioral) of a pending suicidal crisis are identified such that the adolescent can identify when it would be necessary to implement the plan.

Treatment (Clinical Management)

- Specific steps in the plan, arranged **hierarchically**, are then collaboratively identified.

- **Steps in the plan begin** with **strategies the adolescent can employ without the assistance of others** (e.g., listening to music,watching a movie)

- **if ideation/urges persist**, **external strategies** should then be identified that include **responsible adults** (along with their contact information) the adolescent can turn to for help.

- Family members are invited to provide input during development of the plan.

Treatment (Clinical Management)

2-Means Restriction:

- removal of guns from the homes of at-risk youth is strongly recommended.
- Some parents are unwilling to remove guns but are willing to store them securely. Therefore, risk reduction may be achieved by exploring alternatives to removal, including **storing guns locked**, **unloaded**, and/or **disassembled**.

- **3-Inpatient Hospitalization:**
- psychiatric hospital admission provide a safe environment for suicidal patients to resolve acute suicidal crises.

Treatment (Clinical Management)

4-Pharmacological Approaches:

- Data from psychosocial and pharmacological studies suggest that the treatment of depression may not be sufficient to reduce suicidal risk; rather, specific treatments targeting suicidality may be required.
- Although no pharmacological treatment has demonstrated efficacy in treating suicidality per se in youth, medications that target **aggression** and **emotional dysregulation** such as lithium and atypical (second-generation) antipsychotics may hold promise.
- There is concern regarding a possible association between SSRI treatment and emergent suicidality in children and adolescents

Treatment (Clinical Management)

- Studies documented a twofold increase in suicide related
- adverse events among youth receiving active medication as compared with those taking placebo.

- Similarly, the U.S. FDA meta-analysis of short-term placebo-controlled trials of SSRIs and other antidepressants in youth also indicated an increased risk of **suicidal ideation** or **attempt** in patients taking antidepressants.

- Most commonly, suicidality occurred **early in treatment** and consisted of increased or new-onset suicidal ideation, with very few suicide attempts and **no suicide completions**.

Treatment (Clinical Management)

- The mechanism by which SSRIs might increase risk for suicidal behavior is **not known**; possible explanations include: increased irritability and agitation, disinhibition, and potentiation of a mixed state in those with a preexisting bipolar diathesis.

- there is a significant correlation between an **increase in SSRI prescriptions and sales** and a **decline** in both the **overall suicide rate** and the **suicide rate among adolescents** .

- Additionally, the decrease in SSRI prescriptions following the public health warning of a possible association between SSRIs and suicide in youth was associated with a marked increase in youth suicide.
- Furthermore, one meta-analysis supports the assertion that 11 times more depressed youth will show a good clinical response to SSRIs than will become suicidal.

Treatment (Clinical Management)

5-Psychotherapy Approaches:

- **cognitive-behavioral therapy (CBT)**
- **Dialectical behavior therapy (DBT)**
- **Family Interventions**

THANK YOU FOR YOUR ATTENTION