Depression, self-harm and suicide risk in adolescents

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Overview

• Depression, self-injury and suicide risk in adolescents
• Special considerations
  – Sex and gender
  – The COVID-19 pandemic
  – Social media
• Strategies for intervention

Prevalence rates in adolescents

<table>
<thead>
<tr>
<th>Depression</th>
<th>NSSI</th>
<th>Suicidal Ideation</th>
<th>Suicide attempts</th>
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<tr>
<td>6-25%</td>
<td>18%</td>
<td>11%</td>
<td>6%</td>
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In 2020, more than 6,600 U.S. youth ages 10-24 died by suicide
– National Center for Health Statistics

Prevalence of Suicidal Ideation and Suicide Attempts Among US Adolescents, 1991-2019

Non-suicidal self injury (NSSI)

- The deliberate act of causing damage to one’s own body tissue, without suicidal intent.
- Typical onset during the adolescent period
- Transdiagnostic behavior – occurs in multiple different diagnoses, or no diagnosis
Risk Factors for NSSI

- History of adverse experiences (abuse, neglect, bullying)
- Friends that engage in NSSI
- Marginalized identity (e.g. LGBTQ)

Potential poor outcomes associated with NSSI

- Chronic NSSI; difficult to quit
- Scarring
- Unintentional severe injuries
- Suicide attempts

NSSI as “practicing” for suicide

- Joiner’s theory: 3 components lead to suicide attempts
  - Thwarted belongingness
  - Perceived burdensomeness
  - Acquired capability

**Sex and gender**

- Prevalence of depression and NSSI is greater in adolescent girls
  - Gender difference emerges after puberty
  - Early pubertal timing is a risk factor for adverse mental health in girls but not boys
- These effects are likely to be related to a combination of biological sex differences (e.g., hormonal differences, sexual dimorphism in the brain, etc.) and experiential differences (e.g., cultural expectations, privileges, societal support versus discrimination)
- Youth who identify as a sexual minority or gender minority are at much higher risk for depression, self-injury and suicide

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**COVID-19 impacts on adolescent mental health**

- Meta-analyses show high rates of depression and anxiety in children and adolescents during the pandemic
- Adolescents were more impacted by than adults
  - Especially female adolescents
- High rates of loneliness in children and adolescents – a known risk factor for later depression
- Adolescent vulnerability to anxiety and depression persists after the lockdown measures are lifted

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**Lockdown interruptions: Impact on child/adolescent development**

- School closures
  - Academic difficulties
  - Social isolation from peers
- Extra-curricular activities cancelled
- An interruption in social interaction at a time when peer interaction is crucial for development

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1. Murata, Depression and Anxiety 2021
2. Ma et al, J Affective Disorders 2021
4. Loades et al, JAACAP 2021
5. Berger et al, Child Adolesc Ment Health 2021
Other pandemic stressors impacting adolescents

- Grief – family members lost due to COVID-19
- Financial stress to the family
- Housing losses
- Greater reliance on social media
- Disruption in mental health / behavioral health treatment
- Domestic violence in at-risk families

Adolescent mental health hospitalizations

- After a lull in the first few months, a nationwide surge in adolescent psychiatric hospitalizations, bed shortages nationwide
- Over half of adolescent psychiatric crisis admissions related to COVID-19-related stressors

Longitudinal study of brain development in adolescents with and without self-injury

- 152 adolescent girls aged 12-16 with varying levels of severity of self-harm
- Multi-level assessments of brain, behavior and physiology over 3 years

BRIDGES: Brain Imaging Development of Girls' Emotion and Self
NSSI during the COVID-19 pandemic

- All BRIDGES participants and parents were invited to participate in 3 surveys in June, August and October 2020
- Funded by the UMN COVID-19 Rapid Response grant

Contributing factors to engaging in NSSI during the pandemic

- Persist > Desist: Perceived stress, Loneliness
- Desist > Persist: lower family support
- Persist > Never: emotion regulation difficulties
- Never > Persist: friend support

The Role of Social Media

- Screen time has long been a concern of parents and pediatricians
  - More screen time >> more time being stationary, less green time, fewer real in-person connections
  - Concerns about content need for parental oversight – inappropriate topics, cyberbullying, suicide contagion
  - This issue came to the forefront during the pandemic lockdown when it became impossible to set limits as screens were the only way to continue learning and to connect with peers
Social Media – Positives

- Information searching / sharing / gathering
- Social support / connectedness – can be critical for young people who cannot find a supportive group in their local community
- Searching for humor
- Inspiration
- Creative expression
- Feeling less alone
- Support and advice

Social Media – Negatives

- Problematic patterns
  - Addictive use “when I start I just can’t stop”
  - Nighttime use
  - Cyberbullying
  - Posting for shock value
  - Compare and despair

Social media and mental health

- Research to date has not revealed a direct correlation between social media use (in and of itself) and mental health symptoms / suicide risk
- Problematic social media use has been generally correlated with depression
  - Some evidence that problematic social media use is more common in adolescent girls and in those starting at a younger age
- Social media posting about suicide is related to suicide risk
Social media and suicide clusters

- Research on suicide clusters showed that posting suicide content was associated with suicidal ideation (SI) and suicide attempts (SA), and that among those who had no history of SI/SA, viewing cluster suicide-related content was associated with higher odds of SI/SA.

Intervention

- Screening
- Assessment
- Safety Planning
- Evidence-Based Psychotherapies
- Parent Guidance
- Medication Strategies

Importance of screening

- Youth rarely spontaneously disclose emotional distress, suicidal thoughts or self-injurious.¹
- Parents are usually unaware of their children’s self-injury.²³
Approach for assessing self-injury and suicide risk in adolescents

- Open, neutral, matter of fact, safe, supportive, non-judgmental, "I can handle this."
- Interview adolescent separately from parents
- Remember: Asking about suicidal thoughts and self-injury does NOT make it worse! Patients experience being asked about their suicidal thoughts as supportive.

Standard Safety Precautions/Safety Planning

- Removal of means
  - (e.g. remove or lock up guns, sharp objects, etc.; use lock boxes for all prescribed medications; eliminate alcohol from the home)
- Increase parent monitoring and communication
- Resources: local emergency services, crisis services, and suicide hotlines
Treatment approaches for pediatric depression

<table>
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<tr>
<th>Mild</th>
<th>Mild to moderate</th>
<th>Moderate to Severe</th>
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<tr>
<td>• Psycho-education</td>
<td>• Cognitive Behavioral Therapy (CBT)</td>
<td>• Medication</td>
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<tr>
<td>• Supportive Therapy</td>
<td>• Interpersonal Therapy (IPT)</td>
<td>• Medication + CBT or IPT</td>
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1st line treatment for NSSI and Suicidality in adolescents: Dialectic Behavioral Therapy (DBT)

- 173 adolescents with a history of past suicide attempt and repetitive self-harm
- Randomized to DBT versus individual and group supportive therapy
- Significant advantages were found for DBT on both NSSI and suicide attempts, and NSSI at 6 months

Guiding parents

- Emphasize the importance of the parent/teen relationship
- Encourage parents to view the behavior as a symptom and a sign of suffering
  - Be supportive rather than judgmental / punitive
- Encourage validation of teen’s emotional experience
Addressing key risk factors

• Identify past traumatic experiences and address sequelae
• Identify and addressing safety in the environment to avoid further adverse experiences (child abuse, bullying, discrimination, etc.)

Promoting opportunities to connect and thrive

• Engagement
• Connection
• Finding meaning
• Finding enjoyment
• Being in the moment

Summary

• Depression, self-injury and suicidal ideation commonly emerge during the adolescent period and represent important risk factors for death by suicide
• Prevention and intervention strategies should consider risk and protective factors in a changing world
Thank you!

Questions?
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