Suicidal Behaviors among Youth: Overview of Risk and Promising Intervention Strategies

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Goals of Presentation

• Overview of Risk Factors
• Overview of Promising Intervention Strategies
Definitions

- **Suicide Ideation**: Thoughts of engaging in suicidal behavior, with or without a specific plan.
- **Suicide Attempt**: A potentially self-injurious behavior with evidence of at least some intent to die. The suicide attempt may or may not result in injuries.
- **Suicide**: Death caused by self-directed injurious behavior with at least some intent to die.
Suicide is a Major Public Health Problem

• Suicide is the 2\textsuperscript{nd} leading cause of death for 10- to 24-year-olds in the US in the year 2013 (CDC, 2015)
• Suicide is the leading cause of death among college students (Turner et al., 2013).
• Suicide is the 10\textsuperscript{th} leading cause of death for all age groups in the US. (CDC, 2015)
• Concern about suicidal behavior or risk is one of the primary causes of child psychiatric emergencies and hospitalizations
Costs of Suicide and Suicidal Behavior

• Costs associated with suicides among youths and young adults ages 12 to 24 in the year 2010 were estimated to be $8.9 billion (CDC WISQARS database, 2015)

• Costs associated with ED visits and hospitalizations for suicide attempts among youths and young adults ages 12 to 24 in the year 2010 were estimated to be $22 million and $2.9 billion, respectively (CDC WISQARS database, 2015)
Risk Factors
Proximal Risk Factors

• Interpersonal conflicts (e.g., arguments with parents or girlfriend)
• Interpersonal losses (e.g., death of loved one, break-up of a relationship)
• Legal or disciplinary events
Distal Risk: Demographic Characteristics

- Gender
- Age
- Race/Ethnicity
Suicide is Developmentally Mediated: Rates (per 100,000) as a Function of age (for year 2013)
Rates of Suicide Deaths (per 100,000) among 12-24 year olds (2013)
Rates of Attempted Suicide Among Students in the Last Year According to the YRBS

*Eaton et al. (2014) for the year 2013
**Grunbaum et al. (2000), averaged years 1991-1997 because of small representation in survey
***Jones et al., unpublished data for the year 2003; among American Indian youths attending Bureau of Indian Affairs schools only
Distal Risk: Psychiatric and Cognitive Characteristics

• Psychiatric and substance abuse disorders
  – Majority of suicides and suicide attempts occur in context of mood disorders, alone, or comorbid with other disorders
  – However, almost all psychiatric and substance use disorders associated with increased risk
  – With that said, most individuals with psychiatric and substance abuse problems do not engage in suicidal behavior
Distal Risk: Psychiatric and Cognitive Characteristics

• Psychiatric and substance abuse disorders
  – In two reports from longitudinal studies of youths conducted in North Carolina,¹,² most psychiatric disorders were associated with increases in risk
  – Greater comorbidity = greater risk
  – Great majority of attempts occurred in presence of depressive disorders

Distal Risk: Psychiatric and Cognitive Characteristics

– Up to 75% to 95% of individuals who attempt suicide or die by suicide have mental or substance use disorder

– Most suicidal adolescents (>80%) receive some form of mental health treatment\(^1\)

– In a little over half of the cases (>55%), the treatment starts prior to the onset of suicidal behavior\(^1\)

\(^1\)Nock et al. (2013). Prevalence, correlates, and treatment of lifetime suicidal behavior among adolescents: Results from the National Comorbidity Survey Replication Adolescent Supplement. JAMA Psychiatry, 70(3), 300-310.
Distal Risk: Substance Abuse

– The strength of relationship between substance use disorders and suicide attempts strengthens from adolescence through young adulthood\(^1\)
– Alcohol and substance use can increase impulsivity and decrease inhibition
– Alcohol and substance use may provide a method (e.g., overdose) for suicidal behavior
– Substance abuse problems can increase the likelihood of other risk factors for suicidal behavior such as depression and anxiety

Distal Risk: Other Psychiatric and Cognitive Characteristics

- Impulsivity and externalizing problems
- Non-suicidal self-harm behaviors
- Anxiety and panic
- Sleep disturbance
- Discharge from the hospital within the last year
- Previous history of suicide attempts
Distal Risk: Other Psychiatric and Cognitive Characteristics

- Hopelessness
- Few reasons for living
Distal Risk: Social and Interpersonal Characteristics

• Minority sexual orientation – risk associated with:
  – Stress regarding “coming out” or anticipated disclosure of sexual orientation
  – Being considered gender atypical in childhood by parents
  – Parental efforts to discourage gender atypical behavior
  – Victimization, including hostility and verbal abuse, related to being gay
  – Estrangement from, or loss of friends or relationships with family members due to sexual orientation
Distal Risk: Social and Interpersonal Characteristics

• Bullying (particularly in context of other vulnerability factors)
• Contagion (exposure, clusters)
• Lack of social supports or “connectedness” to others
Distal Risk: Other Characteristics

• Trauma / Abuse
• Family History of Suicidal Behavior
• Access to Lethal Means
## Methods of Suicide (2013)

<table>
<thead>
<tr>
<th>Methods</th>
<th>All Ages</th>
<th>10-14</th>
<th>15-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>51.5%</td>
<td>35.5%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Suffocation/Hanging</td>
<td>24.4%</td>
<td>59.8%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Poisoning</td>
<td>16.1%</td>
<td>2.6%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>
Understanding Risk in Context

• Suicide and suicidal behavior are multiply determined – there is no one single cause
• There is much heterogeneity in the characteristics of individuals who engage in suicidal behavior
• Although we can identify characteristics of groups of individuals who may be at higher risk, very difficult to predict on an individual basis who will engage in suicidal behavior
• Most individuals who have risks such as depression do not engage in suicidal behavior
Help-Seeking

- Prior to engaging in suicidal behavior, many suicidal individuals have communicated to others that they have had feelings of being suicidal.
- In the months prior to suicidal behavior, many suicidal individuals have had contact with a physician.
- Most suicidal behavior among youths does not receive medical attention, and parents and other adults are often unaware of youths’ suicidal behavior.
- Even after receiving a referral, many suicidal individuals and their families either do not receive care or drop out of treatment.
Barriers to Care and Gaps in Care

• Barriers to care:
  – Stigma
  – Financial, transportation, and other practical barriers to care
  – Cultural and religious beliefs
  – Desire to put suicidal crisis “behind them”

• Gaps in care:
  – Often after individuals have been referred to higher level of care (hospital, ED) where close observation, there is a gap before care can be accessed in the community (a gap in the continuity of care)
Promising Prevention Strategies

• Gatekeeper training
• Screening
• Educational Training Programs for Physicians
• Means restriction (particularly of firearms)
• Comprehensive community-based suicide prevention efforts (e.g., Garrett Lee Smith Memorial Suicide Prevention Program)


Resources

• National Suicide Prevention Lifeline 1-800-273-8255 and Crisis Chat Line -
  http://www.suicidepreventionlifeline.org

• American Foundation for Suicide Prevention –
  http://www.afsp.org
  http://afsp.org/chapter/afsp-north-carolina/

• American Association of Suicidology -
  http://www.suicidology.org

• Suicide Prevention Resource Center –
  http://www.sprc.org
Resources

• Duke Center for the Study of Suicide Prevention and Intervention (CSSPI) -
  http://psychiatry.duke.edu/divisions/pediatric-and-
developmental-behavioral-health/duke-center-study-
suicide-prevention-and-int

• Duke Integrated Pediatric Mental Health
  http://ipmh.duke.edu/

• Recommendations for Responsible Reporting on Suicide:
  http://reportingonsuicide.org
Thank you!
Questions or follow-up:
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