Understanding Stress and Suicide In Adolescents

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Overview

- Epidemiology of adolescent suicide
- High risk groups
- Warning signs
- Communication strategies
- Immediate intervention
- Overview of suicide intervention literature
Worldwide Suicide Rates & Trends

- Suicide is a leading cause of death around the world
- 1 million people die by suicide each year worldwide
- Onset of suicidal thoughts increases sharply in adolescence and young adulthood and stabilizes mid-life
- 33% of those with suicidal thoughts make a suicide plan and 29% an attempt
- Transition from thoughts to attempt occurs in 1st year more than 60% of the time
Cross National Adolescent Suicide Rates

- **Lifetime Prevalence Rates Cross-Nationally**
  - 21.7% - 37.9% suicidal thoughts
  - 1.5% - 12.1% attempt suicide

- **12-month Prevalence Rates Cross-Nationally**
  - 11.7% - 26.0% suicidal thoughts
  - 1.8% - 8.4% attempt suicide

- **Gender differences**
  - Males complete suicide at higher rates
  - Females attempt suicide at higher rates

(Nock et al., 2008)
Percentage of High School Students Who Seriously Considered Attempting Suicide, * by Sex, † Grade, † and Race/Ethnicity, † 2013

*During the 12 months before the survey.
†F > M; 9 > 12, 10 > 12, 11 > 12; H > B, H > W (Based on t-test analysis, p < 0.05.)
Black and White races are non-Hispanic.
Percentage of High School Students Who Attempted Suicide,* by Sex,† Grade,† and Race/Ethnicity,† 2013

*One or more times during the 12 months before the survey.
†F > M; 9 > 12, 10 > 12; B > W, H > B, H > W (Based on t-test analysis, p < 0.05.)
Black and White races are non-Hispanic.
RISK FACTORS
Who Are The High Risk Groups?

- Prior suicide attempt (#1)
- Suicidal ideation
- Mental health and substance use disorders
- Non-suicidal self-injury
- Impulsivity / aggression (including bullying)
- Trauma history
- Peer rejection / victimization
- Sexual minority status
- Chronic illness or significant injury
- High perfectionism

*Context of low family support*
Substance Use and Suicidality

- SUD associated with a 3-4 fold increase in suicidal behavior
- Substance abuse most consistently associated with the most serious suicidal behaviors
- More impairing use, "advanced” use, or use of "harder" drugs more likely to be associated with suicidality

(Esposito-Smythers & Spirito, 2004; Goldston, 2004)
Why are substance use and suicidality related?

- Substance use...
  - can increase impulsivity and decrease inhibition
  - provide a method (e.g., overdose) for suicidal behavior
  - Increase likelihood of other risk factors for suicidal behavior (e.g., depression)
  - associated with neglect of positive activities, or reduced time spent in activities that protect or buffer against suicidal behavior

(Schuckit & Schuckit, 1989)
Why are substance use and suicidality related?

- Adolescents may engage in both behaviors for similar reasons (e.g., to escape or dampen experiences of distress)
- Due to common factors (e.g., genetic predisposition to both)
- Due to association with other risk-taking behaviors

(Esposito-Smythers & Spirito, 2004; Goldston, 2004)
Eating Disorders and Suicide

- Anorexia highest suicide risk of all psychiatric disorders

- Rates of suicide attempts
  - 3%-20% with Anorexia Nervosa
  - 25%-35% with Bulimia Nervosa

- Population-based prospective study of adolescents (n=717; ages 13-22)
  - Eating disorder in adolescence increases risk for a suicide attempt in young adulthood five-fold
  - Fasting and self-induced vomiting elevate risk for a later suicide attempt (OR's = 4.29 and 6.46, respectively)

(Franko & Keel, 2006; Johnson, Cohen, Kasen, & Brook, 2002)
Sub-syndromal eating symptoms and suicidality

- Project EAT - 4,746 7th-12th grade students

- Suicidal ideation and suicide attempts more common (even after controlling for depression) among youth who report
  - Weight control behaviors (fasting, vomiting, meal skipping, etc.)
  - Body dissatisfaction

- No association with BMI

(Crow, Eisenberg, Story, Neumark-Sztainer, 2008)
Why are eating disorders and suicidality related?

- Correlates of suicide risk among those with eating disorder
  - Substance abuse, depression, physical or sexual abuse
  - Non-suicidal self-injury, aggression, obsessive tendencies, perfectionism, low self-acceptance/self-esteem

- Anorexia
  - Desire to die due to the chronic nature of disorder, medical complications, & poor quality of life
  - Poor health decreases likelihood of living through an attempt

- Bulimia
  - Affect regulation - soothe negative affect, refocus pain from bulimic symptoms to attempt, communicate extent of pain

(Favaro & Santonastaso, 1995; 1997; Fennig & Hadas, 2010; Franko & Keel, 2006; Miotto & Preti, 2007; Stein et al., 2003)
Primary Reasons for Attempt

- To die
- Relief from a terrible state of mind
- Escape from an impossible situation
- To make people understand how desperate you feel
- To make people feel sorry for the way they have treated you

(Boergers et al., 1998)
Injury and Suicide

- Type and permanency of injury
- Premorbid functioning
- Post-injury adjustment
- Presence of protective factors
Suicidality may be more likely among injured athletes (TBI) when...

- Pre-existing mental health or substance abuse problem that negatively impacts coping ability
- Injury results in cognitive limitations that increase risk (e.g., problem-solving deficits, impulsivity, communication difficulties)
- Injury results in a significant loss of protective factors
  - Social network, social status, identity, self-esteem, scholarship, etc.
- Inadequate support is provided around injury & any losses
- Develop hopelessness, feelings of worthlessness, mental health or substance abuse problem post-injury

(Dennis et al., 2011; Fazel et al., 2014; Mackelprang et al., 2014; Yurgelun et al., 2011)
Perfectionism & Suicide

- Psychological autopsy studies - 50% to 85% of adolescents died by suicide described as "perfectionistic"

- Socially prescribed perfectionism, concern about mistakes, doubts about actions, & self-criticism all associated with suicidality

- Urgent public appeal in communities with multiple suicides...
  - Educate about pressure of achieving perfectionistic standards
  - Encourage teachers and parents to look for/attend to psychological pain among perfectionistic teens

(Flett, Hewitt, & Heisel, 2014; O’Connor, 2007)
Socially Prescribed Perfectionism

- Socially prescribed perfectionism
  - Perception that others demand perfection from oneself
  - Heightened sensitivity to criticism & social comparison feedback
  - Perfect performance will only lead to even higher expectations
  - Ruminative and brooding style
    - Preoccupation with thoughts of not living up to “ideal” self or others' expectations fuels feelings of inferiority, deficiency, & hopelessness
    - Tendency to believe one is a disappointment & burden on others

(Flett, Hewitt, & Heisel, 2014)
Socially Prescribed Perfectionism

- Source and high risk contexts
  - Socially imposed expectations can come from multiple people across multiple settings (home, school, broader society)
  - Chronic exposure to situations and contexts that place excessive pressure (or perceived pressure) on teen to be perfect are most harmful to adolescents with socially prescribed perfectionism

(Flett, Hewitt, & Heisel, 2014)
Socially Prescribed Perfectionism

- Perfectionistic self-presentation
  - Present a false image of flawlessness & invulnerability
  - Hide behind self-presentation of high achievement
  - Leads to concealment of pain and suicidal thoughts & plans
  - Distress not apparent to others (family, teachers, coaches, etc.)
  - Teen with “no warning signs”

(Flett, Hewitt, & Heisel, 2014)
Why are socially prescribed perfectionism and suicide related?

- Low self-disclosure
  - Distinguishes those who think about vs. engage in suicidal acts
  - Heightened sense of alienation, isolation, loneliness

- Greater degree of planning = more lethal attempts

- Intense shame over failed attempts increases future risk
  - Perfectionistic attitudes predict SI 6 months later post-hospitalization

- Co-occurring conditions
  - Psychache (unbearable psychological pain)
    - Uncontrollable achievement or interpersonal stress/failure (e.g., bullying)
  - Hopelessness (can’t change a negative future)

(Flett, Hewitt, & Heisel, 2014)
TYPES OF SUICIDE RISK & WARNING SIGNS
Type of suicide risk

- Passive death wish
- Suicidal thoughts without plan or intent
- Suicidal thoughts with plan or intent
- Suicidal threat
- Interrupted attempt (by self)
- Aborted attempt (by another)
- Suicide attempt – with explicit or inferred intent to die
Warning Signs for Suicide

- Change in sleeping and eating habits
- Weight loss or gain
- Irritability or unexplained crying
- Frequent complaints of physical symptoms
- Loss of interest
- Withdrawal from friends, family, and regular activities
- Persistent boredom
- Difficulty concentrating
Warning Signs for Suicide

- Acting out behavior, delinquent behavior, truancy, and/or running away
- Alcohol and drug use
- Decline in grades
- Neglect of personal appearance
- Personality change
- Signs of psychosis (hallucinations or delusions)
- Not tolerating praise or reward
Acute Warning Signs for Suicide

- Put affairs in order
  - giving away favorite possessions
  - making a will
  - throwing away belongings
- Suddenly cheerful after a period of depression
- Talk about death, suicide, and/or no reason to live
- Preoccupation with themes of death (words, artwork)
- Complain of being a bad person or “rotten inside”
- Verbal hints “I won’t be a problem much longer”
- Expressing thoughts of hopelessness “why try?”
Communication Strategies with Suicidal Adolescents
Does Asking About Suicide Trigger Suicidal Thoughts?

2342 high school students

- Completed a survey at start of study
  - Half of surveys had suicide questions and half without suicide questions
- No difference between the groups on a measure of distress immediately after the first survey or at follow-up
- No differences in high risk youth

(Gould et al., 2005)
Clinical Principles

• Be very attentive

  • Someone is listening and trying to understand distress
    • Helps decrease immediate threat
    • Dispel stigma
    • Less likely to believe others may think “crazy or shameful”

• Lack of attention
  • Feel as if no one cares
  • Can lead to escalation to communicate seriousness of pain
Clinical Principles

- Remain calm and non-threatened
  - Confidence can have a calming effect
  - Sharing with you because they want help
Clinical Principles

• Give adolescent space and time to vent

  • Let them share what they are thinking and feeling

  • Do NOT just trying to jump in and solve problem

  • Show empathy in words, tone, body language “sounds like going through a really tough time right now”
Clinical Principles

• Use the word “suicide”
  • Avoiding use may reflect stigma and judgment
  • Helps adolescent openly share feelings

• Stress a “team” approach to the problem
  • Adolescent is not alone anymore
  • You are going to get them help
Clinical Principles

• Disclosure to parent
  • Meet with the parent alone
  • Be prepared for many types of reactions
  • Take ALL suicidal statements seriously
  • Strongly encourage parents to show concern and support
  • Share intervention plan and answer questions
Clinical Principles

- Disclosure to a mental health professional for a risk assessment
  - Teen may beg you not to share with anyone
  - Convey how much you care and that you could never take the risk of losing the teen
  - Stay with the teen until contact is made with a mental health professional
  - Remind teen that he/she is no longer alone
Immediate Intervention Plan

• Risk assessment
  • School suicide response team
  • Current therapist
  • Woodburn mobile crisis unit*
  • Children's Regional Crisis Response* (http://www.nationalcounselinggroup.com)
  • Dominion Hospital*
  • Emergency Room or Call 911*
  • Inova Kellar Center
  • GMU Center for Psychological Services
  • GMU Counseling and Psychological Services

Note: This list is not exhaustive

* Offers emergency 24 hour services for new clients
24 Hour Hotlines & Resources

- National Suicide Prevention Lifeline
  - 1-800-273-TALK (8255)

- Crisis Link
  - 1-800-SUICIDE (784-2433)

- American Foundation for Suicide Prevention
  - www.afsp.org
Post-Referral: What are the evidence-based (tested in RCTs) treatments for adolescent suicidal behavior?
What therapies reduce suicide attempts better than comparison?

- Adolescent group (Process + TAU; Developmental + TAU)?
  - No (Wood et al, 2001; Hazell et al., 2009; Green et al., 2011)

- Family (4 skill based sessions + TAU; attachment-based)?
  - No (Harrington et al. 1998; Diamond et al., 2010)

- Individual (CBT, supportive therapy, meds, CBT + meds)
  - No (Brent et al., 2009; Donaldson et al., 2005)

- Parent training (psychoeducation & skills + TAU)
  - Possibly (composite SI, SA, NSSI) (Pineda & Dadds, 2013)

- Individual + Family (mentalization + TAU)
  - Possibly (composite SA & NSSI) (Rossouw & Fonagy, 2012)
What therapies reduce suicide attempts better than comparison?

- Individual + Family + Parent - YES!!

- Multi-systemic therapy (MST) vs. psychiatric hospitalization for teens with SI or SA
  - MST fewer suicide attempts than psychiatric hospitalization (Huey et al., 2004)

- CBT vs. Enhanced TAU for teens with SI or SA and substance use disorder
  - CBT fewer suicide attempts, hospitalizations, ER visits, heavy drinking episodes & marijuana use than Enhanced TAU (Esposito-Smythers et al., 2011)
What are the evidence-based suicide prevention programs in schools and the community?
Levels of Prevention

• Prevention
  • Universal: Broad population of interest (i.e., school)
  • Selective: Above average risk (i.e., school failure)
  • Indicated: High risk (i.e., depression)
Universal Prevention in Schools

- Suicide awareness programs
- Screening programs
- Gatekeeper training programs
Suicide Awareness Programs

- Provide education (health class)
  - Raise awareness of suicide & dispel myths
  - Provide information about MH resources
  - Recognize warning signs in self and peers
  - Facilitate referral to trusted adult

- Consist of
  - Lectures
  - Role plays
  - Videotape depicting a suicidal teen
  - Education for school staff
Do they work?

- Some lead to improvement in
  - Knowledge
  - Attitudes toward suicidal peers and help-seeking
  - Willingness to seek help if distressed

- Do NOT reduce suicidal behavior

- Uncommon but some show negative effects
  - Hopelessness and poor coping responses among boys
  - Negative reaction among those most at risk
    i.e., teens with a history of suicidal behavior

(Perloe et al., 2014)
Suicide Screening Programs

- Identify and refer students at risk for suicidal behaviors

- Screen for mental health symptoms
  - anxiety
  - depression
  - substance abuse
  - suicidal thinking/behavior
Columbia Teen Screen

- Stage 1: Students complete a brief self-report scale (10 mins.)
- Stage 2: Complete computerized interview (VOICE-DISC)
- Stage 3: If meet criteria for MH disorder on DISC, meet with clinician who contacts parents and makes referral for treatment
Does it work?

- Identifies up to 75% of students at high risk for suicide
- Must be followed with evidence based treatment

(Shaffer, 2004)
Why isn’t screening used in all schools?

- Teens who are not suicidal are identified in the Stage I screen
- Uneasiness managing suicidal behavior
- Increase in workload
- Few places to send teens for treatment
- Fear of triggering suicide through screening

*We can overcome these obstacles through community collaboration!!*
Combined Awareness & Screening

- Signs of Suicide (SOS) Program
- Best documented effects on suicidal behavior
Combines 2 approaches to suicide prevention:

**EDUCATION** about Depression and Suicide

- Video
- Discussion

**SCREENING** for Symptoms of Depression and Suicide

- BSAD-7 Item Scale for Suicide Risk

“Friends for Life”:

The ACT Technique

The Action Steps Taught by the SOS Program

The SOS Program teaches teens that depression is a treatable illness and empowers them to respond to a potential suicide of a friend or family member by using the A.C.T. technique:

ACT

A - Acknowledge the signs of suicide
C - Respond with Care
T - Tell a responsible adult
Does it work?

30 days after program (with effects persisting into 3M)

- Increase in students seeking counseling for depression and suicidal thoughts
- Increase in students seeking counseling on behalf of a friend
- Decrease in suicidal ideation
- Decrease in suicide attempts

(Aseltine & Demartino, 2004; Aseltine, 2002)
Gatekeeper Training Programs

- Train people who may come in contact with youth at suicide risk in methods to identify and refer at-risk youth for treatment

- Teachers, counselors, physicians, community leaders
Attempted Suicide Intervention Skills Training (ASIST)

- ASIST most evidence with teens
- 2 day workshop (14 hours)
- 300,000 facilitators trained worldwide
- Gatekeepers trained to “connect, understand, and assist (safety plan & referral)"

(Cornell, Williams, & Hague, 2006)
Does it Work?

- Increased knowledge and greater willingness to intervene with suicidal adolescents
- Fewer suicide attempts at ASSIST trained schools than comparison schools
- BUT...need places to send teens for evidence based treatment once identified
Levels of Prevention

- Prevention
  - Universal: Broad population of interest (i.e., school)
  - Selective: Above average risk (i.e., school failure)
  - Indicated: High risk (i.e., depression)
Students at Risk for Failure

- Students at risk for school failure or drop out often have multiple difficulties
- Reconnecting Youth Series (Eggert & Thompson)
- Skills training rather than suicide awareness
Reconnecting Youth

- Counselors CARE (C-CARE)
  - 1:1 assessment + crisis intervention session

- Parent CARE (P-CARE)
  - P-CARE: 2 hour in-home training + booster call

- Groups:
  - P-CARE + C-CARE
  - P-CARE
  - C-CARE
  - Usual Care

Hooven et al. (2010)
Does it work?

- After treatment and 7 months later:
  - Teens in all conditions showed decreases in suicidal ideation and threats
  - Greatest reductions in P-CARE + C-CARE

- After 6 years:
  - P-CARE + C-CARE showed lowest risk trajectories
Levels of Prevention & Treatment

- Prevention
  - Universal: Broad population of interest (i.e., school)
  - Selective: Above average risk (i.e., school failure)
  - Indicated: High risk (i.e., depression)
Selective/Indicated Prevention in Community

- Suicide, Alcohol, and HIV Prevention for Teens in Mental Health Treatment “Project SHAPE”
- Adolescent group + parent group + multi-family group workshop
- George Mason University
- Multiple community collaborators (TC Williams HS, Alternative House, CMHCs, private practices, etc.)

(Esposito-Smythers, Brown, Hadley, & Curby, in preparation)
Does it work?

- After controlling for covariates, preliminary results...
  - Lower rates of suicide attempts
  - Lower rates of binge drinking
  - Trend toward lower rates of risky sexual behavior

(Esposito-Smythers, Brown, Hadley, & Curby, in preparation)
Conclusions

- While sports participation generally serves as a protective factor, conditions such as substance abuse, eating pathology, injury, and perfectionism may increase risk for suicide among athletes.

- Asking a teen about suicidal thoughts and supporting a teen through the referral process may save a teen’s life.

- Promising suicide treatment programs
  - Combined individual + family + parent training therapies

- Promising suicide prevention programs
  - Combined suicide awareness & screening in schools
  - Gatekeeper training in schools
  - Individual + parent brief interventions
  - But...MUST have places to send teens and families for evidence based treatment before implementing these programs

- If we work together as a community, garner funding, and pool resources we can prevent adolescent suicide.
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