Finding Hope in the Midst of Adolescent Suicide

Melissa Soderberg
*Columbus Academy, Ohio*

John V. Campo
*The Ohio State University*
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Learning Goals/Objectives

- Present one school’s experience with multiple suicides and associated prevention efforts
- Review the public health relevance of youth suicide and associated risk factors
- Review existing knowledge regarding suicide prevention in youth
The Public Health Challenge

- Suicide responsible for 42,773 deaths in U.S. in 2014
  - 10th leading cause of death across the lifespan
  - 2nd leading cause of death ages 10 to 24 years
    - 5,502 deaths in this age group
    - More deaths than cancer, heart disease, congenital anomalies, respiratory disease, influenza, pneumonia, stroke, meningitis, septicemia, HIV, diabetes mellitus, anemia, nephritis, and liver disease combined
  - 2nd leading cause of death ages 10 to 19 years
    - 2,259 deaths in this age group
  - 2nd leading cause ages 25 to 34 years
  - 4th leading cause of death ages 35 to 54 years
U.S. Leading Causes of Death
Ages 10 to 24 years

- Accidents: 47%
- Suicide: 20%
- Homicide: 16%
- Cancer: 7%
Suicidal Thinking and Behavior
Prevalence in Youth

- Prevalence of suicidal ideation
  - ~15% of U.S. high school students annually

- Prevalence of suicide attempts
  - ~7% of U.S. high school students annually
  - ~100 to 200 attempts for every completed suicide

- 15 to 24 year age range especially vulnerable
  - Age of ↑’ing risk for mood and other disorders
  - Risk of being “lost in transition” to adulthood
    - May “fall between the cracks” of health system
  - Importance of campus suicide prevention efforts
Suicidal Thinking and Behavior (cont.)

Screening in Primary Care

- 1547 youth ages 11 to 20 years screened
  - “Has there been a time in the past month when you have had serious thoughts about ending your life?”

- 209 youth (14%) reported suicidal ideation
  - Depression strongest predictor of (+) screen
  - 87% of screen (+) youth also reported substance use, carrying weapon, fighting, and/or depressive symptoms

- 205 of 209 patients assessed by SWer (98%)
  - PCC and SWer determined disposition

- 154 patients (74%) referred to specialty MH
  - 65% (with records) received MH services within 6 months

Gardner et al. Pediatrics 2010; 125: 945-952
Pediatric Suicide Risk Factors

- Untreated psychiatric disorder
  - Disorders of Mood and Emotion
    - Depression main predictor of suicidal ideation
    - Depression ↑ risk of completion and attempts
      - 2-7% of MDD youth later complete suicide
      - 40-80% of attempters suffer from depression
    - Bipolar disorder confers especially ↑’ed risk
  - Alcohol and drug abuse
  - Schizophrenia and psychotic disorders
  - Attention-Deficit/Hyperactivity Disorder (ADHD)
  - Personality disorders
Mental Disorders and Addictions

- Impairing disorders of emotion, thought and behavior
- Highly prevalent
  - Mental disorders affect ~ 20% of population
  - Alcohol and drug use disorders affect ~ 8% of population
    - High rates of comorbid mental and addictive disorders
  - ~4 to 5% of adults are seriously mentally ill (SMI)
  - More prevalent in physically ill, especially chronic illness
  - More prevalent in Medicaid and uninsured populations
- Typically begin early in life
  - ~50% experience onset by age 14 and ~75% by age 24
  - Long delays between onset and recognition common
- Majority are untreated or inadequately treated
Pediatric Suicide Risk Factors

- **Demographic**
  - Males
  - White/Native American
  - Increasing age into adolescence
  - Rural residence

- **Previous suicide attempts**
  - Especially in prior 6 months and high lethality

- **Family factors**
  - FH of completed suicide
  - FH mood and/or substance use
  - Family conflict
Pediatric Suicide Risk Factors

- Access to lethal agents
  - Especially firearms
- Stressful life events
  - Maltreatment, especially sexual abuse
  - Interpersonal conflict
  - Loss and disrupted attachments
  - Legal/discipline problems
- Contagion/Imitation
  - Exposure to suicide
  - Media influences
Pediatric Suicide Risk Factors

- Individual characteristics
  - Impulsive aggression
  - Hopelessness
  - Sexual orientation/gender issues
  - Poor social skills/social isolation
  - Lack of religious commitment

- Physical health problems
  - Epilepsy, brain injury, HIV
  - Specific medications
The Good News...

- There are some proven suicide prevention strategies
- Proven treatments for mental disorders and addictions
  - “A range of efficacious...treatments exists for many mental disorders” *U.S. Surgeon General, 1999*
- ↓ suicide rates associated with ↑ access to care
  - ↓ suicide rates associated with:
    - ↑ BH service funding
    - ↑ per capita health and BH professionals
    - Access to 24 hour crisis services
    - Presence of a “minimal” BH safety net

*Campo, 2009*
The Bad News...

- Most youth at risk for suicide receive no treatment
  - Only 7 to 20% of suicide completers had seen a MH professional in prior 1 to 3 months
  - Rural residence associated with ↑ risk

- Many receive inadequate services
  - Only minority get treatment meeting care standards
    - < 20% receive proper treatment
  - “State of the art treatments for mental disorders are not being adequately translated or disseminated into clinical practice...” U.S. Surgeon General, 1999
The Bad News…

- Most youth at risk for suicide unrecognized/untreated
Suicide Prevention Strategies

- **Primary Prevention**
  - Building resilience prior to period of risk
  - Ex. Good Behavior Game

- **Secondary Prevention**
  - Identifying and managing youth known to be at risk
  - Ex. Gatekeeper training

- **Tertiary Prevention**
  - Preventing suicide in already suicidal youth
  - Probably the most common approach to date has been to identify and treat individuals already in crisis
  - Ex. CBT/DBT, lithium carbonate, antidepressants
Suicide Prevention Strategies (cont.)

- Universal strategies
  - Population-wide approaches

- Selective strategies
  - Target groups at risk for suicide

- Indicated strategies
  - Target individuals at risk for suicide

- Strategies often overlap
  - Ex. - Means restriction relevant at all three levels
Gatekeeper Training

- Most widely used youth suicide prevention programs
  - Several available

- Main components
  - Increase knowledge about suicide
  - Improve beliefs/attitudes about suicide prevention
  - Decrease reluctance ask about suicide and for help
  - Enhance self efficacy to intervene

- Targets may vary depending on program
  - Educators, staff, professionals, peers, parents, etc.
Gatekeeper Training (cont.)

- Signs of Suicide
  - Probably the best researched Gatekeeper program for secondary schools with 3 RCTs showing short term reductions in suicide attempts among students
  - Includes screening and a curriculum focused on how to cope with depression and common adolescent life challenges, including getting help for self or others
  - Decrease attempts did not seem to correlate with increased help seeking, so may be effective through a different mechanism
  - Relationships matter...
Suicide Prevention Strategies (cont.)

- **Inhibiting Factors**
  - Social support
  - Presence of others
  - Religious commitment
  - Living in culture with strong taboos against suicide

- **Facilitating Factors**
  - Ready access to lethal means (e.g., firearms)
  - Exposure to recent suicide or media reports
  - Impulsive aggressive personality traits
    - *Adolescents particularly vulnerable*
  - Being alone
  - Living in a culture with weak taboos against suicide
Suicide Prevention Strategies (cont.)

Active Disorder

Stressful Event

Acute Mood Change

Suicidal Ideation

Inhibition
- Social taboo
- Support
- Others present

Facilitation
- Aggressive traits
- Recent example
- Alone
- Available method

Survival

Suicide

Find and Treat

Hotlines

Media Guidelines

Method Control
Suicide Prevention
Warning Signs

- Talking about suicide or wanting to die
- Looking for a method of suicide such as searching online or buying a gun
- Feeling hopeless or having no reason to live
- Feeling trapped or in unbearable pain
- Feeling like a burden to others
- Increasing use of alcohol or drugs
- Anxiety, agitation, depression, reckless behavior
- Visiting or calling people to say goodbye
- Giving things away, such as prized possessions.
Indicated Strategies: Target Individuals at Risk

Psychotherapy RCTs

- **Cognitive Behavioral Therapy (CBT)**
  - *CBT for suicide attempters ↓ suicidal behaviors*
  - *Specific CBT elements focus on suicidality*
    - Brown et al., 2005

- **Dialectical Behavior Therapy (DBT)**
  - *↓ rate of repeat suicide attempts in adults*
    - Linehan et al., 2006

- **Attachment Based Family Therapy (ABFT)**
  - *↓ suicidal ideation /improved parent-child relations*
  - *Larger trial targeting suicidal behavior in progress*
    - Diamond et al., 2010
Indicated Strategies: Target Individuals at Risk

Psychotherapy RCTs (cont.)

Promising strategies include:

- **Augmenting familial and non-familial social support**
  - ↓ family conflict, expressed emotion, and criticism
  - ↓ patient sensitivity to conflict and criticism
    - Wedig and Nock, 2007
- "Front-loading" treatment in proximity to suicidal crisis
- **Encouraging positive affect, healthy sleep, and sobriety**
  - Brent et al., 2013
Indicated Strategies: Target Individuals at Risk

Pharmacotherapy RCTs

- Antidepressants*
  - ↓ *suicidal ideation and behavior in adults*
    - Mediated by reductions in depressive symptoms
      - Gibbons et al., 2012
    - *Observational data suggest benefit*

- Clozapine*
  - ↓ *suicide risk/aggression in schizophrenia RCTs*
    - *FDA suicide prevention indication in schizophrenia*

- Lithium*
  - ↓ *suicide risk in adults with mood disorders*
Suicide Prevention
Responding to an Identified Crisis

- If a person is threatening, talking about or making plans for suicide, these are signs of acute crisis
- Do not leave the person alone.
- Remove any firearms, drugs or sharp objects that could be used for suicide from the vicinity
- Take person to an emergency room or clinic at a hospital, psychiatric hospital, or other health facility
- If the above options are unavailable, call 911 or the National Suicide Prevention Lifeline at:
  - 1-800-273-TALK (8255)
Thank You

- **Selected References**