The Institute of Medicine Report on Prevention and What it Means to Campus Suicide Prevention
C Hendricks Brown
Epidemiology & Public Health
U Miami

GLS Campus
Suicide Prevention
Grantee Meeting
February 2, 2010

Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults

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- LINDA A. RANDOLPH, Developing Families Center, Washington, DC
- IRWIN SANDLER, Prevention Research Center, Arizona State University
- MARY ELLEN O’CONNELL, Study Director
Committee Charge

- Review promising areas of research
- Highlight areas of key advances and persistent challenges for prevention
  - Extended to mental health promotion
- Examine the research base within a *developmental framework context as well*
- Review the current scope of federal efforts
- Recommend areas of emphasis for future federal policies and programs of research

Other Acknowledgements

- R34MH071189-01 (Wyman, Brown) NIMH
- RCT of Gatekeeper Training for Suicide Prevention
- SM57405-01 (Wyman, Brown) SAMHSA
- Evaluating Success of a Gatekeeper Program in Linking Suicidal Students to Treatment
- P20MH071897-01 (Caine, Brown, Conwell, Knox) NIMH
- Developing Center On Public Health and Population Interventions For The Prevention Of Suicide
- R01-MH40859 (Brown) NIMH NIDA CDC
- Methodology for Mental Health/Substance Abuse Prevention & Early Intervention
- SPAN-GA Developmental Support from the State of Georgia
- Cobb County School District, Georgia
- JDS Foundation (Brown, Wyman) Development of an Integrated Suicide Prevention Program for Rural and Underserved Youth
- R56MH078580 Antidepressant Treatment and Suicidality: Biostatistical/Methodological Solutions (Gibbons & Brown) NIMH
Three Themes

1. There are effective prevention programs for many mental health/drug abuse outcomes

   Little we can definitively say about preventing suicide itself, but clear evidence for preventing attempts and ideation.

   There are clear implications from this and the previous IOM report on preventing suicide (Goldsmith, 2002)

Three Themes

2. Effective prevention programs (and principles) are not often being implemented

   How to use what science is available to develop and refine the practice of prevention programs aimed at suicide
Three Themes

3. What is required for this next stage?
   Federal, state, institutional, and community leadership

Public Health Approach to Prevention

- Epidemiology:
  who, when, where
  Antecedent risk and protective factors
- Studying the full Population rather than clinic samples
- Preventive Interventions designed to target risk and protective factors
  May be in the individual
  Often in the social environment
  Low base rate outcomes, including suicide, cannot be accurately predicted at the individual level.
Epidemiology of Mental Disorders and Drug Abuse (and Suicide)

- Where in the population do disorders occur
- Person – Place (Context) – Time
  Example: Alcohol related violence
  Example: Times of transition
Suicide risk: Transitions from home to dorm and from dorm to off-campus

Rates of Suicide by Region and Rurality (20-24 Years Old)

Suicide Rate for 20-24 Year Olds from 1999-2003 by Region and Rurality

- Large Central Metro
- Large Fringe Metro
- Medium Metro
- Small Metro
- Micropolitan (nonmetro)
- NonCore (nonmetro)
Epidemiology of Mental Disorders and Drug Abuse (and Suicide)

- Population derived findings can dramatically differ from clinic samples
  - While most people who commit suicide or attempt suicide have mental disorders, the vast majority have only limited involvement with treatment or services
  - Working only with those who come through the mental health clinic will only have small effects on overall reduction of suicide.

Successes in reducing suicide in a high-risk population

Motto & Bostrom 2001 – continued personal letters
- 3000 depr/suicidal hospitalizations
- Reduced suicides for 2 years, not 5 years
Preventive Opportunities Early in Life

- Early onset (¾ of adult disorders had onset by age 24; ½ by age 14)
- First symptoms occur 2-4 years prior to diagnosable disorder
- Common risk factors for multiple problems and disorders

Prevention Window

![Graph showing age at first symptom and age at first diagnosis for different conditions.](image-url)
How early do risk factors for suicide occur?

- 4th Grade Ideation Predicts Age 19 attempts (Ialongo et al. 2004)
- Depression, stress, substance abuse, child trauma predict later attempts
- 8-9 year old’s thoughts of death and suicide co-occur with depressive symptoms, conduct problems, and aggressive-disruptive behavior in school (Wyman et al., in press)

Clear Evidence that Some Disorders Can be Prevented

- Interventions tied to modify antecedent risk factors and enhance protective factors
- Multi-year effects on substance abuse, conduct disorder, antisocial behavior, aggression and child maltreatment
Evidence that Some Disorders Can be Prevented (cont’d)

- Indications that incidence of adolescent depression can be reduced
- Interventions that target family adversity reduce depression risk and increase effective parenting
- Emerging evidence for schizophrenia

Evidence of Secondary School-related Effects

- School-based violence prevention can reduce aggressive problems by one-quarter to one-third
- Social and emotional learning programs may improve academic outcomes
- Promising but limited benefit-cost information
Preventive Intervention Opportunities

Interventions by Developmental Phase

- Prior to Conception
  - Prevention of smoking
  - Prevention of substance use
- Prenatal
  - Home visiting
  - Parenting skills training
  - Social and behavioral skills training
- Early Childhood
  - Classroom-based curriculum to prevent substance abuse, aggressive behavior, or risky sex
  - Prevention of depression
- Childhood
  - Prevention focused on specific family adversities
  - (bereavement, divorce, parental psychopathology, parental substance use, parental incarceration)
- Early Adolescence
- Adolescence
- Young Adulthood
  - Community interventions
  - Policy

Relevance to Suicide Prevention

- Interventions that Target the Risk Factors for Suicide, are also likely to Prevent Suicide
  - Heart Disease: Primordial Prevention
  - Mental Health: Developmental Epidemiology Approach to Prevention of Distal Outcomes
Targeting Risk Factors for Suicide

- Depression
- Drug Abuse
- Family Conflict
- Child Abuse
- Conduct Disorder

Good Behavior Game: A First-Grade Intervention that Prevents Suicide Attempts and Ideation into Young Adulthood (Wilcox et al. 2008)
School-Based Program Examples

- Good Behavior Game
- PATHS
- Life Skills Training
- Linking Interests of Families and Teachers
- Fast Track
- Adolescent Transitions Program

Defining Prevention and Promotion

- Prevention should not include the preventive aspects of treatment
- Prevention and promotion overlap, but promotion has important distinct role
- Mental health not just the absence of disorder
Population Targets for Prevention (Gordon)

Universal – apply to all in population
  require face-to-face meeting with advisor
Selective – groups having high risk
  special attention to those with academic problems
Indicated – those already exhibiting early symptoms or behaviors
  provide continuity of mental health services for incoming students

Mental Health Promotion Aims to:

- Enhance individuals’
  - ability to achieve developmentally appropriate tasks (developmental competence)
  - positive sense of self-esteem, mastery, well-being, and social inclusion
- Strengthen their ability to cope with adversity
- Directly related to goals of colleges and universities
What we know about Gatekeeper Training in High Schools (Brown et al., 2006; Wyman et al, 2008)

- Randomized trial in a GA public school district w/ 32 middle & high schools, 48,000 youth for over 2 years
- Training of all adults increases their knowledge & attitudes toward gatekeeper role
- Increase in referral behavior limited to those adults already connected with kids
- Modest increase in referrals for suicidal kids in middle school
- No increase in referrals for suicidal kids in high school
Youth who attempt suicide are harder to reach

- They are much less likely to have trusting relations with adults
- They have fewer friends
- Those friends they have are likely to feel positive towards suicide

Sources of Strength (LoMurray, North Dakota, 2005)

- Uses peer leaders, from diverse social cliques, to change school-level norms about suicide and codes of silence
- Enhances connection with trusted adults who then refer or support youth
- Enhances coping with stress through protective factors
Sources of Strength

- Access to Mental Health
- Access to Medical
- Spirituality
- Generosity/Leadership
- Positive Friends
- Family Support
- Caring Adults
- Positive Activities

Increasing Social Connectedness through Peer Leaders

- Warning signs more likely to be detected by peer leaders or other peers
- Youth more likely to communicate concern to trusted adult gatekeeper
- Adult more likely to question suicidal youth
- Suicidal youth more likely to accept help

Suicidal Youth

Trusted Adult Gatekeeper
Gatekeeper Training

Sources of Strength
Peer Leader Training
As part of Action Step 2 all students at Perry HS, NY are naming their Trusted Adults and forming a growing circle of trust.

**Help-Seeking Norms** of Peer Leaders increased by training (p<.05) in Cobb County, North Dakota and NY (N = 18 Schools, Wyman et al., under review)
Significant Positive Changes in Norms of Student Population

<table>
<thead>
<tr>
<th>Size of Impact of Sources of Strength on Students</th>
<th>Low</th>
<th>Med</th>
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<tbody>
<tr>
<td><strong>SUICIDE NORMS</strong></td>
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<tr>
<td>Help for Suicidal Peers</td>
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<tr>
<td>Reject Codes of Silence</td>
<td>0.63 (p&lt; .05)</td>
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<td><strong>CONNECTEDNESS</strong></td>
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<td>Help Seeking from Adults</td>
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<tr>
<td>Sources of Strength Coping</td>
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Putting Knowledge Into Practice: Overarching Recommendations

- Make healthy mental, emotional, and behavioral development a national priority
  - Establish public prevention goals
- White House should establish ongoing multi-agency strategic planning mechanism
  - Align federal resources with strategy
- States and communities should develop networked systems
Putting Knowledge Into Practice: Funding (Cont’d)

- Target resources to communities with elevated risk factors
- Facilitate researcher-community partnerships
- Prioritize use of evidence-based programs and promote rigorous evaluation across range of settings

Continuing a Course of Rigorous Research: Overarching Recommendations

- NIH should develop comprehensive 10-year prevention and promotion research plan
- Research funders should establish parity between research on preventive interventions and treatment interventions
Continuing a Course of Rigorous Research: 10-Year Priorities

- Prevention (specific disorders and common risk factors) and promotion
- Replication, long-term outcomes, and multiple groups
- Collaborations across institutes and agencies for developmentally related outcomes
- Further improve current interventions
- Enhance community implementation

Enhance Community Implementation: an Example of Sources of Strength
Home Page

- Coordinators will be able to register their schools and keep useful info.
- Coordinators will receive update e-mails each time a school completes a report/Action Step.
- Coordinators will be able to print out reports and monitor schools' progress.
- Document accomplishments.

Tracking Main Events

- Coordinators, advisors, and trainers work on establishing timelines.
- Target dates can be modified according to the progress of the school.
- Guides Adult Advisors through the SoS program.
- Keeps coordinators updated about the progress of each school.
- Redirects Adult Advisors to useful resources and important forms.

Sources of Strength Community Research Project

What is Sources of Strength?

- Health promotion and suicide prevention program for middle/high schools and colleges.
- Peer leaders conduct messaging activities.
- Strengths and skills development in a safe school.
- Promote another using voices and behaviors.
- Develop suicide awareness.
- Evidence-based: Sources of Strength increases protective factors in schools.

For more information about Sources of Strength: http://www.sourcesofstrengthinfo.com

What is the Sources of Strength Community Research Project?

- Evaluating Sources of Strength in diverse communities using rigorous research designs.
- Assisting communities implementing Sources of Strength to evaluate their prevention activities and goals.
- Collaboration of communities, universities, state and local agencies.

For more information about the Sources of Strength Community Research Project contact Dr. Peter A. Woman (Director) at 866-794-3804.
Peer Leaders
Nomination Process

- Adult Advisors record the process of Peer Leader nomination
- Adult Advisors evaluate how representative the Peer Leader groups is

Peer Leader Nomination Process

- Number of adults invited to fill a Nomination Form
- Number of adults who returned Nomination Form
- Total number of students nominated by adults
- Number of students invited to participate
- Number of students who provided signed Parent Permissions

Peer Leaders
Peer Leader Roster

- Adult Advisors can track their Peer Leaders' participation and reengage Peer Leaders
- Register new Peer Leaders
Summary

- Prevention science as a guide
  - Selection of evidence-based programs
  - Principles of prevention – decrease negative impact
  - Adoption of programs by communities
  - Improved implementation of programs
  - Sustainability of programs
Additional Information

- Report available at: http://www.nap.edu
- Summary available as free download

References

- Wyman PA, Brown CH et al. (under review). An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools