

Youth Suicide

Risk Factors and Warning Signs



Psychiatric Diagnoses

- Goldston and colleagues (2009) followed 180 adolescents post-psychiatric hospitalization for up to 13 years and examined the relationship between suicidal behavior and co-occurring psychiatric diagnoses.
- Most psychiatric disorders (e.g.,) were related to an increase in suicide attempt risk.
 - major depressive disorder, dysthymic disorder, generalized anxiety disorder, panic disorder, attention-deficit/hyperactivity disorder, conduct disorder, and substance use disorders
- The strength of these relationships tended to increase as adolescents got older.

Psychiatric Diagnoses – Eating Disorders

- Swanson, Crow, Le Grange, Swendsen, and Merikangas (2011) examined the prevalence of suicidal ideation and attempts in adolescents aged 13-18 years with eating disorders.
- Lifetime suicidal ideation was associated with all types of eating disorders.
- More than half of all adolescents with bulimia reported suicidal ideation and nearly one-third reported a suicide attempt.

Psychiatric Symptoms

- Prinstein and colleagues (2008) found that depressive symptoms, lower parent-reported externalizing symptoms, and higher frequencies of non-suicidal self-injury decreased the rate of remission of suicidal ideation.
- Even when considering the impact of depression, heavy alcohol consumption is a clear risk factor for suicide in younger adolescents (Asetine et al., 2009).

Psychiatric Symptoms

- Perceptions of low self-worth and dissociative states (Wagner, 2009)
- Hopelessness is most pervasive cognitive state in suicidal individuals (Beck et al., 1990; Rudd; 2000; Joiner, et al. 2009)
 - It is difficult in adolescents to parse out the contribution of hopelessness to suicidality when depression is prevalent.
 - Hopelessness has also been reported to be more severe amongst multiple suicide attempters rather than those making a single attempt (Esposito et al., 2003).

Suicidal Ideation and Suicidal Behavior

- Kerr et al. (2008) – followed 206 boys annually
 - By age 20, nearly half of the sample endorsed suicidal ideation
 - 57.3% of the sample had reported some level of suicidal ideation by age 29.
 - More than half of the boys who eventually reported suicidal ideation had done so by age 14
 - Suicidal ideation was most prevalent at age 13
- Reinherz et al. (2006) – 30-year-olds who reported suicidal ideation at age 15:
 - 2x as likely to have Axis I diagnosis
 - 12x more likely to have made a suicide attempt
 - 15x more likely to have suicidal ideation in past four years (age 26-30)

Family Factors (Wagner, 1997)

- Poor family communication and problem solving
- Parental psychopathology
 - May also result in the modeling of disturbed behavior (e.g., NSSI, substance abuse).
- Family conflict and stress
- A history of abuse distinguishes suicide attempters from both nonpsychiatric individuals and psychiatric patients without a previous suicide attempt .
 - Brodsky and colleagues (2008) found child sexual abuse, but not physical abuse, to be correlated with suicide attempts.
- Family structure changes (i.e., loss due to death, separation/divorce of parents, child placement out of the home) increase risk for attempts

Parent Suicide as a Risk Factor

- Wilcox et al. (2010)
 - Children and adolescents whose parents died by suicide were at a threefold greater risk for suicide.
 - Parental death by suicide is further associated with an increased risk in their offspring of depressive, psychotic, and personality disorders.
- Agerbo, Nordentoft, and Mortensen (2002)
 - Father died by suicide over 2x as likely to die by suicide
 - Mother died by suicide were nearly 5x more likely to die by suicide
- The magnitude of risk for suicide attempt hospitalization is greater following maternal suicide compared to paternal suicide (Kuramoto et al., 2010).

Peers and Youth Suicide

- Wagner (2009) indicates that suicidal youth are more likely to experience stress in interpersonal peer relationships.
- Suicidal youth are also more likely to have friends who are suicidal (Prinstein, Boergers, & Spirito, 2001)
- King and Merchant (2008) documented the importance of numerous social and interpersonal factors on emerging adolescent suicidality.
 - family and peer support ↓ risk
 - social isolation ↑ risk
 - peer victimization ↑ risk
 - emotional neglect ↑ risk

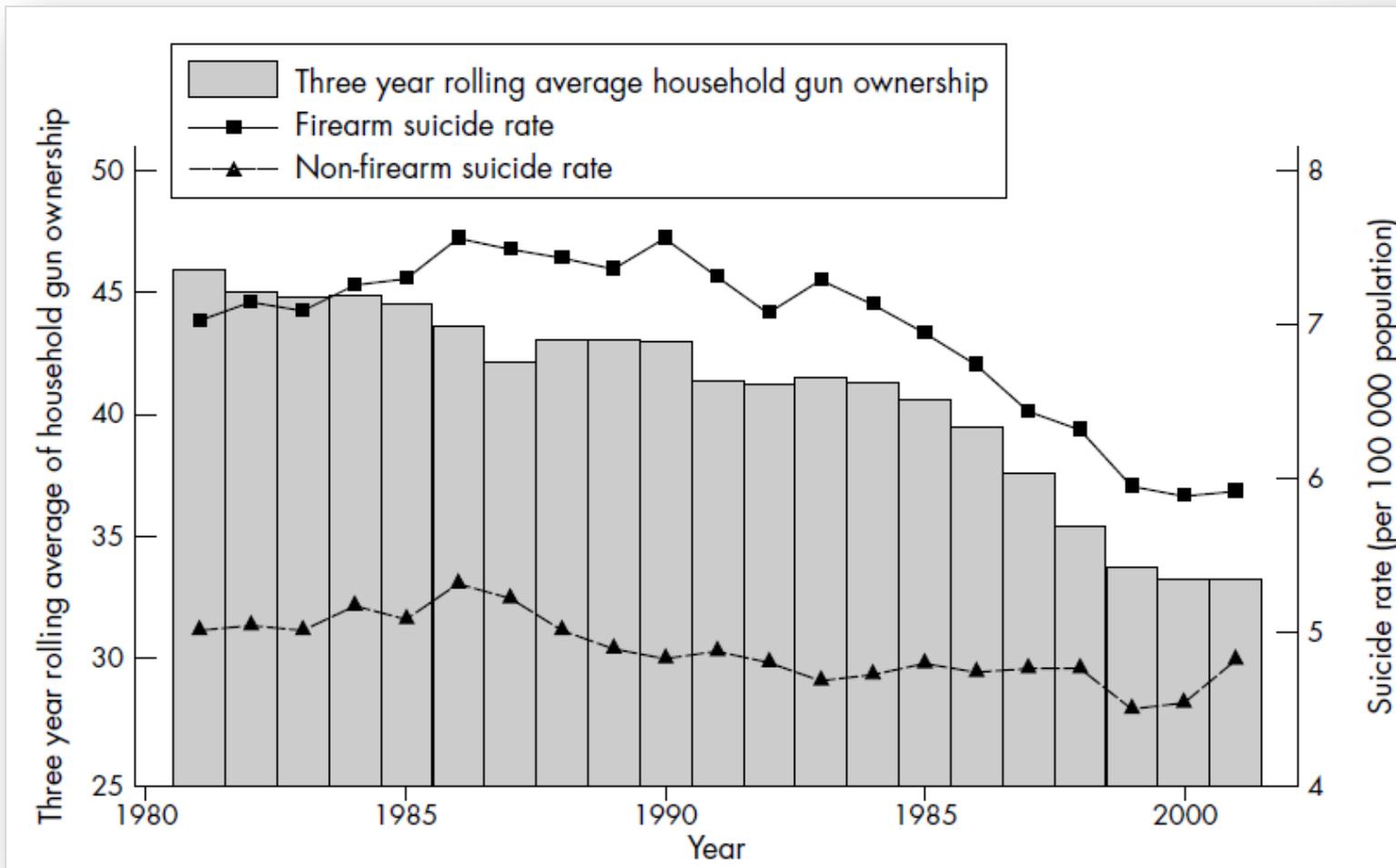
Firearms and Suicide

- Most common method of suicide in both genders in US
- Very high fatality rate for attempts (84-92%)
- More likely to be used if victim is intoxicated (Brent, 1987, 1993)

The Relationship with Gun Availability and Suicide

- Population studies
 - Correlation between gun availability and firearms suicide rate
 - Gun ownership is not correlated with depression, anxiety, substance abuse suicidal ideation, planning or attempt (Brent, 1991; Hemenway & Miller 2002; Miller et al., 2009)
 - As gun ownership drops, so does the firearms suicide rate

Household Gun Ownership and Firearms Suicide Rate*



*Miller, et al., 2006

Case-control Studies

- Guns are **more likely** to be in the home of suicide victims
- Conversely, if a gun is in the home, it is highly likely to be the **method of choice**
- The gun used for suicides is **most likely found in the home**, or less commonly the home of a relative
- Guns in the home may be a **bigger risk factor** for suicide in **younger** individuals but still associated with mid-life and elder suicides

Case-control Studies: Guns in the Home and the Method of Suicide*

Use of gun for suicide if kept in home	67- 88%
Use of gun if not kept in home	6-23%
Firearms & alcohol use (OR [95% CI])	7.3
Bought gun within 2 weeks of suicide	3%

*Brent, 1993; Kellerman, 1992; Shah, 2000

Non-Suicidal Self-Injury

- Walsh (2006) reports NSSI is 90x more likely than death by suicide

Special Populations and Considerations

Sexual Minority Youth

LGB Prevalence

Behavior, attraction, or identity

- Same-sex behavior: 1% of students¹
- Same-sex attraction (some degree of): 10% to 20% of young adults²
- Self-identification as gay/bisexual: fewer than 2% of adolescents³
- Possibly only 10% of youth who engage in same-sex behavior self-identify as gay¹

1. Savin-Williams & Cohen in Meyer & Northridge, 2007

2. Savin-Williams, 2005

3. Garofalo et al., 1999

Transgender Prevalence

There is no widely accepted estimate for the prevalence of people who are transgender.

Research Challenges

- Most hospital and vital records – no information on sexual orientation or gender identity
- Sexual orientation or gender identity hard to know for psychological autopsies
- Respondents do not identify with these terms
- Convenience sampling and small samples
- Few studies include racial/ethnic data
- Lack of longitudinal studies

Suicide Ideation in LGB Youth

LGB youth are 1½ to 3 times more likely to report suicide ideation than non-LGB youth.

Suicide Prevention Resource Center, 2008

Suicide Ideation in LGB Youth

- 31.2% of GB male high school students vs. 20.1% of heterosexual male high school students (past month)¹
- 36.4% of LB female high school students vs. 34.3% of heterosexual female high school students (past month)¹
- 47.3% of GB adolescent boys vs. 34.7% of non-GB adolescent boys (lifetime)²
- 72.9% of LB adolescent girls vs. 53% of non-LB adolescent girls (lifetime)²

1. Remafedi et al., 1998

2. Eisenberg & Resnick, 2006

Suicide Ideation in LGB Youth

- 42% of LGB youths said they sometimes or often thought of killing themselves.
- 48% of LGB youth said suicidal thoughts were clearly or at least somewhat related to their sexual orientation (lifetime).

D'Augelli et al., 2001

Suicide Attempts in LGB Youth

- LGB youth are 1½ to 7 times more likely to have attempted suicide than non-LGB youth.¹
- LGB youth attempts may be more serious, based on some initial findings about:
 - Intent to end their lives²
 - Lethality³

1. Suicide Prevention Resource Center, 2008

2. Safren & Heimberg, 1999

3. Remafedi et al., 1991

Suicide Attempts in LGB Youth

- LGB youth were more than 2 times more likely to attempt suicide than their heterosexual peers (past year).¹
- Bisexual and homosexual male high school students were 7 times more likely to attempt suicide than heterosexual counterparts (lifetime).²
- 30% of LGB youth vs. 13% of heterosexual youth (median age of 18) had attempted suicide (lifetime).³
- 52.4% of LB females vs. 24.8% of non-LB females and 29.0% of GB males vs. 12.6% of non-GB males had attempted suicide (lifetime).⁴

1. Russell & Joyner, 2001

2. Remafedi et al., 1998

3. Safren & Heimberg, 1999

4. Eisenberg & Resnick, 2006

Suicide among LGB Youth

- Compared to non-LGB youth:
 - LGB youth have higher rates of suicide attempts.
 - LGB youth suicide attempts *may* be more serious.

The higher rate of suicide attempts, as well as the possibility that attempts among LGB youth are more serious, *may* mean that this group of youth has a higher rate of suicide. However, additional research is needed before we can draw that conclusion.

Suicidal Behavior and Transgender Youth

Transgender youth:

- Limited research exists.
- Studies show higher rates of suicidal ideation and suicide attempts.
- Risk factors: Which ones are in common with those for LGB youth?

Risk and Protective Factors

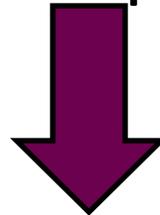
Being LGBT is not itself a risk factor for suicidal behavior

BUT

social stigma and discrimination

unsafe schools

ineffective providers



are associated with mood, anxiety, and substance use disorders, and suicidal behavior.

Risk Factors – LGB Youth

- Gender nonconformity¹
- Internal conflict about sexual orientation²
- Time of coming out³
- Early coming out⁴
- Low family connectedness⁵
- Lack of adult caring⁵
- Unsafe school⁵
- Family rejection⁶
- Victimization⁷
- Stigma and discrimination⁸

1. Fitzpatrick et al. 2005; Remafedi et al. 1991

2. Savin-Williams 1990

3. D'Augelli et al. 2001

4. Remafedi 1991

5. Eisenberg & Resnick, 2006

6. Ryan et al., 2009

7. Bontempo & D'Augelli 2002; Russell & Joyner 2001

8. Meyer 1995

Risk factors – What's different for LGBT youth?

More risk factors or more severe ones:

- Unsafe school
- Rejection/abuse within family
- Victimization
- Previous attempt(s)
- Exposure to suicide loss

Specific to or mostly relevant to LGBT youth:

- Gay-related stress and minority stress
- Gender nonconformity
- Internal conflict regarding sexual orientation

Protective Factors

- Family connectedness¹
- Family acceptance²
- Safe schools¹
- Caring adult¹
- High self-esteem³
- Positive role models³

1. Eisenberg & Resnick, 2006

2. Ryan et al., 2009

3. Fenaughty & Harre, 2003

Protective Factors

Family connectedness plays an important role for LGB youth. Youth who are more protected say, My family...

- “cares about my feelings”
- “understands me”
- “has lots of fun together”
- “respects my privacy, and my parents care about me”

Protective Factors

Family acceptance – parent and caregiver behaviors that help:

- Talk with your child about his/her LGBT identity
- Express affection when you learn that your child is LGB and/or T
- Advocate for child when he/she is mistreated because of his/her LGBT identity
- Bring your child to LGBT events
- Connect your child with an LGB and/or T adult role model
- Welcome your child's LGB and/or T friends and partners into your home
- Believe that your LGB and/or T child can have a happy future

Protective Factors

School safety includes:

- “I feel safe going to and coming from school.”
- “I feel safe at school.”
- “Bathrooms in this school are a safe place to be.”

Eisenberg & Resnick, 2006

Protective Factors

Other adult caring includes:

- How much youth felt that other adults in their community, faith leaders, and other adult relatives cared about them.

Eisenberg & Resnick, 2006

Suicide Prevention – Addressing Risk and Protective Factors

- Include the topic of LGBT youth risk in awareness materials, conferences, and state and local prevention plans
- Provide training for all staff about LGBT issues
- Include the topics of dealing with discrimination and victimization in life-skills training for youth
- Institute protocols for when youth are identified at risk, youth have attempted suicide, or youth have died by suicide

Bullying

Bullying in the United States

- During the 2007-2008 school year, nearly 32% of American MS and HS students reported being bullied (Dinkes et al., 2009).
- Technology leads to new forms of bullying, yet:
 - only 4% in Dinkes study reported being cyberbullied

Bullying and Suicide

- **NO current direct, empirical link between bullying and suicide deaths.**
- SPRC (2011) - both victims and perpetrators of bullying are at higher risk for suicide
- Victims *and* bullies may be at the highest risk (Kim & Leventhal, 2008)
- Klomek and colleagues (2009):
 - Youth who both frequently bully and are bullying victims are more likely to have later suicide attempts and deaths
 - Significance of these findings are lost once depression and conduct problems are controlled.
 - Frequent victimization from bullying is associated with suicide attempts and deaths, even after considering conduct and depression symptoms.

Indirect Link to Bullying

- Internalizing problems (e.g., depression, anxiety, withdrawal), low self-esteem, low assertiveness, and early childhood aggressiveness increase likelihood of being bullied (Arsenault et al., 2010)
- These characteristics in conjunction with difficulty or problems in two influential social contexts, the family and school, that leads to bullying
 - child maltreatment, domestic violence, and parental depression
- School climates that are fraught with conflict and ineffective or inconsistent discipline may also contribute to bullying (Swearer et al., 2010)

Warning Signs for Youth Suicide

Risk Factors vs. Warning Signs

- Risk Factor:
 - A measurable characteristic, variable, or hazard that increases the likelihood of the development of an adverse outcome
 - A risk factor precedes the outcome in time
 - Examples: mental illness (especially depression and other mood disorders), victimization, LGBTQ, being male?
- Warning Sign:
 - A measurable change in behavior, thoughts, feelings, or other indicators in the near future (e.g., minutes, days, up to 1 week) prior to a life-threatening suicidal behavior
 - Relates to current, episodic functioning with proximal relationship to behavior
 - This is what clinicians want to know

Risk Factors vs. Warning Signs

- Key difference = warning signs are near-term risk factors with the greatest available evidence suggesting the highest likelihood of a suicidal behavior occurring in the immediate future

So What Happens if We Search the Internet for “Youth Suicide Warning Signs?”

- Google search found “about 241,000” sites (in 0.4 secs)
- Yahoo found 31.2 million results
- Bing found 37.2 million results
- Sites for participating members in the National Council for Suicide Prevention have more uniformity
- Among the warning signs on display for the public are:
 - Visiting or calling people one cares about
 - Accident-prone (carelessness)
 - Neglecting schoolwork
 - Confusion
 - Neurotransmitter problem



SUICIDE

It's the only way out.

So What is the Message to the Public?

- Vague, inconsistent, non-observable, lacked empirical support
- Even the leading organizations have some level of disagreement
- Perhaps anything could be a warning sign, so
 - A) worry about everything
 - B) worry about nothing
- There is no consensus on what to do
 - Exception = call the Lifeline

Context

The following signs may mean that a youth is at risk for suicide, particularly in youth who have attempted suicide in the past. Risk is greater if the warning sign is new and/or has increased and if it seems related to an anticipated or actual painful event, loss, or change. Finally, the presence of more than one of the following warning signs may increase a youth's risk for engaging in suicidal behaviors in the near future.

Youth Suicide Warning Signs

1. Talking about or making plans for suicide
2. Expressing hopelessness about the future
3. Displaying severe/overwhelming emotional pain or distress
4. Showing worrisome behavioral cues or marked changes in behavior, particularly in the presence of the warning signs above. Specifically, this includes significant:
 - Withdrawal from or changing in social connections/situations
 - Recent increased agitation or irritability
 - Anger or hostility that seems out of character or out of context
 - Changes in sleep (increased or decreased)

If you are concerned about someone, ask yourself the following questions:

Has your friend or family member shown or shared any of the following:

- Talking about wanting to die, be dead, or about suicide, or are they cutting or burning themselves?
- Feeling like things may never get better, seeming like they are in terrible emotional pain (like something is wrong deep inside but they can't make it go away), or they are struggling to deal with a big loss in their life?
- Or is your gut telling you to be worried because they have withdrawn from everyone and everything, have become more worried or on edge, seem unusually angry, or just don't seem normal to you?

For more information or to learn
how you can prevent youth suicide,
please go to:
www.payspi.org