

## Structured Suicide Risk Assessment

**"There is but one truly serious philosophical problem and that is suicide."  
--Albert Camus**

A Training for Treatment Providers, Case Workers,  
Supervision Officers, and other Professionals

Sponsored by the  
Colorado Sex Offender Management Board  
- October 19, 2005  
Raymond Nelson, MA, NCC

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## What We Know

- 1999 Surgeon General in the United States estimated there are 16 attempted suicides for each completed suicide
- Para-suicide, suicidal ideation are known risks
- Many people who commit suicide suffer from clinical depression
  - Robins, E., Murphy, G. E., Wilkinson, R. H., et al. (1959) Some clinical considerations in the prevention of suicide based on a study of 134 successful suicides. *American Journal of Public Health*, 49, 888-899.
- Suicides occur less frequently among depressed people taking antidepressant medication
  - Isacson, G., Bergman, U. & Rich, C. L. (1994) Antidepressants, depression, and suicide: an analysis of the San Diego Study. *Journal of Affective Disorders*, 32, 277-286.

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## Suicide – A Leading Cause of Death

- 2,148,000 US deaths during 1990
  - Tobacco (400,000)
  - Diet and Activity (300,000)
  - Alcohol (100,000)
  - Microbial Agents (90,000)
  - Toxic Agents (60,000)
  - Firearms (50,000)
  - Unprotected Sexual Behavior (30,000)
  - Motor Vehicles (25,000)
  - Illicit use of drugs (20,000)
- ½ of all deaths were attributable to these factors  
McGinnis and Foege (1993) *Journal of the American Medical Association*

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## 1990 Death Certificates

- 10 Leading Causes
  - heart disease (720 000)
  - cancer (505 000)
  - cerebrovascular disease (144 000)
  - accidents (92 000)
  - chronic obstructive pulmonary disease (87 000)
  - pneumonia and influenza (80 000)
  - diabetes mellitus (48 000)
  - suicide (31 000)
  - chronic liver disease and cirrhosis (26 000)
  - HIV infection (25 000)
- McGinnis and Foege (1993) *Journal of the American Medical Association*

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## Suicide Risk – Lifetime Prevalence

- Persons ever hospitalized for suicidality = 8.6%
- Affective hospitalization w/out suicidality = 4.0%
- Mixed inpatient/outpatient populations = 2.2%,
- Non-affectively ill persons = < 0.5%

Bostwick and Pankratz (2000) *American Journal of Psychiatry*

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## Suicide and Adolescence

- Suicide attempts more common in adolescence than any other time in life
- Can't assume ideation, DSH, or para-suicide is simply a "cry for help"
- Evaluate each case systematically

Shaffer (2004) *Focus* 2:517-523

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## ***Suicide and the Elderly***

- Duckworth & McBride (1996): 80% of elderly suicide victims had no psychiatric referrals
- Harwood *et al* (2001): 15% of elderly people who died by suicide were under psychiatric care
- Salib & El-Nimr (2003): surveyed 200 elderly suicides in Cheshire 1989-2001 – found that even those who were known to psychiatric services still preferred to contact their general practitioners in the last few weeks of life

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## ***Risk Factors***

- Vary across populations and age groups (Kapur 2000)
  - Marriage is a risk factor for suicide among teenage girls, but a protective factor among adult women (Bancroft *et al*, 1975; Hawton, 1986)
  - African Americans have lower suicide rates than Caucasian persons (Gibbs, 1997)
    - Recent increases in suicide among adolescents and very elderly persons

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## ***Adolescent Suicide - Risks and Protective Factors***

- Nationally representative sample of 13,110 males and females in grades 7 through 12 during 1995 and 1996

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## ***Adolescent Risk Factors – Suicide Attempts***

- previous suicide attempt
- suicidal behavior of a friend or family member
- violence victimization
- violence perpetration
- alcohol use
- illegal use of drugs
- somatic symptoms
- school problems

Borowsky, Ireland, and Resnick (2001) Pediatrics

Raymond Nelson (2005). Please do not reproduce without permission.

## ***Additional Risk Factors for Female Adolescents***

- somatic symptoms
- history of mental health treatment

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## ***Additional Risk Factors for Male Adolescents***

- Weapon-carrying at school
- Same-sex romantic attraction

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## **Suicide Rates - Adolescents**

- 35.5% for girls with all risk factors and low levels of the protective factors (emotional well-being, parent-family connectedness, parental presence)
- 0.2% for blacks with none of the above risk factors and high levels of the protective factors (emotional well-being, parent-family connectedness, grade point average)

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## **Protective Factors - Adolescents**

- Emotional well-being
- Perceived parent-family connectedness
- Third protective factor varied for different groups
  - Males
    - high parental expectations for school achievement
    - High GPA
    - more people living in the household
    - religiosity
  - Females
    - emotional well being
    - availability of counseling services at school
    - parental presence at key times during the day

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## **Protective Factors**

- Presence of 3 protective factors reduced the risk of a suicide attempt by 70% to 85% for all gender and racial/ethnic groups

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## **Outpatient Risk Factors**

- Suicide outpatients generally younger than other outpatients
- More likely to be male
- History of drug or alcohol abuse
- Primary diagnosis of depression
- Physical health problems reported among 50%
- Males and females differed in marital status
- 73% of therapists report outpatient did not express suicidal ideation or intent
- More than 30% were reluctant to accept treatment

Earl, Forquor, Volo, McDonnell (1994) Hospital and Community Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## **Risk Management**

- Two Approaches
  - High-Risk
    - Cost Effective
    - Excludes larger group of at risk persons
    - Depends upon accurate risk assessment
  - Population (prevention)
    - Accesses a greater range of persons who benefit from services
    - More costly

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## **Challenges in Risk Assessment**

- Usually occurs after a serious incident
- Poor predictive power
  - Sensitivity
  - Specificity

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## 1 in 30 Correct Assault Predictions

- Beck (1985) discussed the statistical impossibility of predicting very rare events
  - Accurate classification of future suicides (sensitivity)
  - Accurate classification of non-suicides (specificity)
  - Palmstierna and Wistedt (1987) less than one percent violence rate at one year – discharged psychiatric patients
  - Treiman et al. (1999) estimated 2% violence rates at 5 years
- With 90% specificity and 90% sensitivity (very good) – false positive rate from 11:1 to 29:1  
Palmstierna (1999) in the British Medical Journal

Raymond Nelson (2005). Please do not reproduce without permission.

## Kapur (2000) Advances in Psychiatric Treatment

- Used Powell et al. (2000) five criteria
  - 2 or more factors was regarded as high-risk
- Good specificity for non-suicides
- Poor sensitivity for suicides

		Suicide	
		Yes	No
Diagnosis	Positive (high risk)	a	b
	Negative (low risk)	c	d

  

		Suicide	
		Yes	No
Number of patients	Too many (high risk)	26	1
	Too few (low risk)	71	89

Fig. 1 (a) sensitivity (a/(a+c)), specificity (d/(b+d)) and predictive value (a/(a+b)) of a diagnostic test to assess the risk of suicide. (b) Powell et al's (2000) results for psychiatric inpatients.

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## Screening Suicide Risk

- 11<sup>th</sup> leading cause of death (2004)
- Found no study that directly assessed whether screening suicide risk in primary care reduced morbidity
- Mixed findings re treating those at risk for suicide reduced attempts or completion
- Some evidence of improved intermediate outcome
  - Improved functioning
  - Reduced depression
  - Reduced ideation

Gaynes, West, Ford, Frame, Klein, and Lohr, (2004) Annals of Internal Medicine

Raymond Nelson (2005). Please do not reproduce without permission.

## Screening Suicide Risk

- Evaluation of USAF Suicide Prevention Program
- Program aimed at reducing risk and improving protective factors
  - Reduce stigma of seek help for psychosocial problem
  - Enhance understanding of mental health
  - Adjusting policies
  - Changing social norms
- Sustained decline in rate of suicide and other adverse outcomes
  - 33% reduction of suicide risk
  - 18 to 54% reduction of other risk

Knox, Litts, Talcott, Feig, Caine (2003) British Medical Journal

Raymond Nelson (2005). Please do not reproduce without permission.

## Screening Suicide Risk

- Evaluated Youth Suicide Screening Program
- 2342 HS students from New York 2002-2004
- Distress and depression did not differ between experimental and control group after questions about suicidality
- Suicidality indices unchanged between experiment and control groups
- Screened High Risk students in experiment group were no more or less distressed than controls
- No evidence for iatrogenic effects of screening

Gould, Marrocco, Kleinman, Thomas, Mostkoff, Cote, and Davies (2005) Journal of the American Medical Association

Raymond Nelson (2005). Please do not reproduce without permission.

## Structured Suicide Risk Measure

- Empirically derived content
- Face-validity
- Structured clinical judgment
- Anticipate adequate inter-rater reliability
- Data accessible to most types of professionals
- Usable in a variety of contexts - can be administered by a Therapists, POs, Caseworkers, mental health counselors, or other trained staff
- Not intended determine the likelihood/probability
- Rating scale – illustrate presence of risk factors
- Possible diagnostic and screening functions

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## Structured Suicide Risk Assessment Checklist

- 12 data points
- Event Documentation
- Time-lining / event-mapping functions
- Includes but does not over-emphasize case-history (static) variables
- Guidance for case-management decisions
- Sensitive to changes in risk levels (dynamic)
- Can assist in the modulation of response to changing risk levels
- Guidance for program/policy decisions
- Decisions are made by professionals – not tests

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## Structured Suicide Risk Assessment Checklist

- 12 Factors from lit. on suicide, suicidal ideation, para-suicide, and deliberate self-harm
  - A. Time – time-frame of suicidal plans
  - B. Place – location – accessible or inaccessible
  - C. Method – degree of detail and specificity
  - D. Viability/lethality of plans – likelihood of completion
  - E. Degree of hopelessness/helplessness
  - F. Mental health stability
  - G. Alcohol and drug abuse – recent / historic
  - H. Native support system
  - I. Professional or spiritual support system
  - J. Employment / academic stability
  - K. History of suicidality – ideation / para-suicide
  - L. Bereavement – death or suicide of a friend or family member

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## Scoring / Rating

- Simple rating improves inter-rater reliability
- Data points are rated for degree of presence
  - Risk factor is absent
  - Risk factor is somewhat present (or unknown)
  - Risk factor is prominent
- Indicates the presence, nature and strength of suicide risk factors
- Does not attempt to weight various data points
- Does not predict the likelihood or probability of suicide (not normed)

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## Items A – D - Ideation

A. Time	0) nothing specific	1) vague time-frame	2) specific time-frame
B. Place	0) nothing specific	1) vague location	2) specific location
C. Method	0) nothing specific	1) vague method	2) specific method
D. Viability	0) lethality unlikely	1) lethality possible	2) probably lethal

- Time frame (degree of specificity and planning)
- Place or location (accessibility)
- Method (degree of specificity and access)
- Viability/lethality (access to firearms)

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## Firearms

- 11 % of all childhood deaths during 1990
- 17 % for youths age 15 to 19
- 41 % for black males age 15 to 19
- Rate of firearm suicide doubled among black males from 1982 to 1988
  - Firearm related suicides for white males did not change but was twice as high
- Risk of suicide is three times higher in homes where a gun is kept

McGinnis and Foege (1993) Journal of the American Medical Association

Raymond Nelson (2005). Please do not reproduce without permission.

## Firearms

- Persons 10 year and older in Illinois
  - 10,287 completed suicides
  - 37,352 hospital admissions for para-suicide
- Firearms 2.6 times more likely than second most lethal method (suffocation)
- Preventing access to firearms can reduce suicide rates 32% among minors and 6.5% among adults

Shenassa, Catlin, Buka (1993) Journal of Epidemiology and Community Health

Raymond Nelson (2005). Please do not reproduce without permission.

## Item E – Hopeless / Helpless

E. Hopeless/Helpless    0) can create alternatives without assistance    1) can create alternatives with assistance    2) unable/unwilling to create alternatives even with assistance

- Can create alternatives without assistance
- Can create alternatives with assistance
- Unable / unwilling to create alternatives – even with assistance

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## Protective Factors

Malone, Oquendo, Haas, Ellis, Li, & Mann, (2000) *American Journal of Psychiatry* –

- Survey of 84 inpatients with depression
- 45 had attempted suicide
  - Greater sense of hopelessness
  - Greater subjective depression
  - More prominent suicidal ideation
  - Reasons for living correlated inversely with these indices
- 39 had not attempted suicide
  - more feelings of responsibility toward family
  - more fear of social disapproval
  - more moral objections to suicide
  - greater survival and coping skills
  - greater fear of suicide
- Neither objective severity of depression nor quantity of recent life events differed between the two groups

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## Item F – Mental Health

F. Mental Health    0) stable – no diagnosis    1) stable with diagnosis    2) unstable/unmanaged

- No diagnosis (esp. Axis I affective disorders)
- Stable with Axis I diagnosis (esp. affective)
- Unstable/unmanaged/un-medicated mental health disorder

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## Suicide Risk and Mental Health

- Inskip, Harris, and Barraclough (1998) *British Journal of Psychiatry*
- Remodeled lifetime suicide risk using contemporary data and modern techniques
  - 27 mortality studies for affective disorders
  - 27 mortality studies for alcoholism
  - 29 mortality studies for schizophrenia
- 6% for affective disorder
- 7% for alcoholism
- 4% for schizophrenia
- Previously regarded as 15%, 15% and 10%

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## Depression and Suicide

- Unipolar depression, including depressed mood, hopelessness, helplessness, intense feelings of guilt, sadness, low self esteem, thoughts of self harm, and suicide, is one of the most important causes of disability worldwide
  - Ustun TB, Ayuso-Mateos JL, Chatterji S, Mathers C, Murray CJ. Global burden of depressive disorders in the year 2000. *Br J Psychiatry* 2004;184: 386-92.
- Up to 15% of unipolar depressed patients with unipolar depression eventually commit suicide
  - Davies S, Naik PC, Lee AS. Depression, suicide, and the national service framework. *BMJ* 2001;322: 1501-2.

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## Schizophrenia and Suicide

- Some data suggest suicide is up to 13 times higher than for non-schizophrenics
- Unaffected by conventional neuroleptics
  - possibility due to negative side effects including akathisia and depression
- Clonazapine linked to 86% reduction of suicidality Meltzer & Okayli (1995), (Walker et al, 1997), (Munro et al, 1999)
  - 25% reduction of suicidal symptoms on multiple indexes
- Olanzapine also reduces suicide (Tran et al, 1997)

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## **Bipolar Disorder and Suicide**

- Population based study in Sweden 1973 to 1995
  - 15,386 hospital discharges w/ bipolar diagnosis
  - 39,182 discharges with unipolar diagnosis
- Cause-specific standardized mortality ratios (SMRs) and numbers of excess deaths were calculated by 5-year age classes and 5-year calendar periods

Osby, Brandt, Correia, Ekblom, Soren (2001) Archives of General Psychiatry

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## **Bipolar Disorder and Suicide**

- SMRs for suicide and bipolar disorder
  - 15.0 males
  - 22.4 females
- SMRs for suicide and unipolar disorder
  - 20.9 males
  - 27.0 females
- SMRs for natural causes of death and bipolar
  - 1.9 males
  - 2.1 females
- SMRs for natural causes and unipolar disorder
  - 1.5 males
  - 1.6 females

Osby, Brandt, Correia, Ekblom, Soren (2001) Archives of General Psychiatry

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## **Bipolar Disorder and Suicide**

- Bipolar I mainly non-mixed
  - Increased risk for substance abuse
  - Lower rates of suicide attempts
- Bipolar II, unipolar, Bipolar I mainly mixed
  - Higher rates of suicide attempt
- Possible independence of contribution of mood disorder and substance abuse to suicide risk
- 504 mood disorders patients in 4 psychiatric units in Sardinia (Italian Mental Health System)

Tondo, Baldessarini, Hennen, Minnai, Salis, Scamonnati, Masia, Ghiani, and Mannu (1999) Journal of Clinical Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## **Bipolar Disorder and Suicide**

Jamison (2000) Journal of Clinical Psychiatry

- 25% to 50% of patients with bipolar disorder also attempt suicide at least once
- Lithium shown to offer most effective anti-suicide medication for bipolar patients

Goodwin, Fireman, Simon, Hunkeler, Lee, and Revicki (2000) Journal of the American Medical Association

- Divalproex becoming most common mood stabilizer in the US
- Risk of suicide death found to be 2.7 higher for bipolar patients treated with Divalproex vs. Lithium
- Hazard ratio for non-fatal attempts 1.7
- Hazard ratio for attempt requiring hospitalization 1.8

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## **Psychiatric Diagnosis and Adolescent Suicide**

- Case-control, psychological autopsy of 120 subjects
- Parent info
  - 59% vs 23% had psychiatric diagnosis
  - 49% vs 26% – had symptoms for three years
  - 46% vs 29% – previous cont. w/ mental health
- Multiple Informants
  - 92%, 52%, and 46% for suicides

Shaffer D, Gould MS, Fisher P, Trautman P, Moreau D, Kleinman M, Flory M. (1996) Archives of General Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## **Psychiatric Diagnosis and Adolescent Suicide Risk Factors**

- Previous attempts and mood disorder (both sexes)
- Substance and/or alcohol abuse (males)
- Mood disorder more common in females
- Psychiatric illness and alcohol/drug abuse more prominent with age

Shaffer, Gould, Fisher, Trautman, Moreau, Kleinman, and Flory (1996) Archives of General Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## Bipolar Disorder and Adolescents

- 27 suicide victims compared with 56 suicidal inpatients
- Four risk factors among victims
  - diagnosis of bipolar disorder
  - affective disorder with comorbidity
  - lack of previous mental health treatment
  - availability of firearms in the homes
- Taken together accurately classified 81.9% of cases

Brent, Perper, Goldstein, Kolko, Allan, Allman, and Zelenak (1988) Archives of General Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## ADHD

- 3 to 7 percent of children
- 60 percent carry symptoms into adulthood
- About 4% of adults
- ADHD is a serious disorder that can have lifelong consequences
  - poor peer relations
  - poor academic and work performance
  - increased risk-taking behaviors
  - increased risk of substance abuse
- Some evidence suggests persons with ADHD are at greater risk of suicide than general population (James, Lai, & Dahl 2004; Swensen, Kruesi, Allen, et al. 2002)

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## Suicide and Hospitalization

- Peak incidents of suicide and undetermined deaths occurs within 28 days after discharge

Geddes JR, Juszczak E. Period trends in rate of suicide in first 28 days after discharge from psychiatric hospital in Scotland, 1968-92. *BMJ* 1995;311:357-60. (5 August.)

- Risk of suicide is increased over 100-fold during the month after discharge
- Approximately 2.8% of those presenting after para-suicide will have suicided w/in eight years
- 15% of patients admitted to hospital with depression commit suicide

Gunnell D, Frankel S. Prevention of suicide: aspirations and evidence. *BMJ* 1994

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## SSRIs and Suicidality

- Suicide rates decreased over 15 years while SSRI use increased
- Increased suicidal ideation observed in some data
- Ferguson et al. (2005) *BMJ* reviewed 702 trials and found increased suicide attempts for antidepressants vs. placebo
  - Two fold increase in attempts for SSRIs and tricyclics
  - Change of 5.6 attempts per 1000 over placebo
- Improved motor function before improved mood?
- September 2004 – FDA required package label describing suicidality risk in pediatric use
  - All antidepressants
  - Recommended products not be contraindicated
- Risks may not be different for adults
  - No evidence of increased suicide
  - Weak evidence of increased self harm
- Some data suggest risks may not be different for older tricyclic antidepressants
- Risk of not treating depression is regarded as greater than increased suicidal ideation from med
- Monitor adjustment to meds carefully

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## Strattera – Eli Lilly and Co.

- September 29, 2005 announced package label changes
- Small but statistically significant (0.4% vs. 0%) increase in suicidal ideation in Strattera vs. Placebo treated children and adolescents
  - 5 patients out of 1357
  - 1 suicide attempt
  - 0% for placebo group
- No evidence of increase for adults

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## Item G – Alcohol / Drug Abuse

G. Alcohol/Drug Abuse    0) no hx or current abuse    1) unknown or past hx of abuse    2) current abuse / misuse

- No history or current abuse of alcohol or drugs
- History of abuse (or unknown)
- Current/recent alcohol or drug abuse/misuse

Raymond Nelson (2005). Please do not reproduce without permission.



## Alcoholism and Suicide

- Murphy and Wetzel (1990) Archives of General Psychiatry
- Estimated lifetime suicide risk at
  - 2% for untreated alcoholics
  - 2.21% for outpatient-treated alcoholics
  - 3.4% for alcoholics identified from hospital admissions
  - Approximately ½ that of previous estimates
  - Consists of seriously affected alcoholics
- Compared with annual US incidence of 1.3%
- Estimated risk for conservatively diagnosed alcoholics as 60 to 100 x that of non-psychiatrics

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## Alcoholism and Suicide

- 82 suicides, 106 live pop alcoholics, 142 clinical alcs
- Seven non-acute clinical/historical risk factors
  - continued drinking
  - major depressive episode
  - suicidal communication
  - poor social support
  - serious medical illness
  - Unemployment
  - living alone
- Any four factors identified 69% of the suicides
- Women and African American men showed same pattern as white men

Murphy, Wetzel, Robins, and McEvoy (1992) Archives of General Psychiatry

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## Item H – Support System

H. Family/Friends/  
Native Supp Sys

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0) viable family/friend support  
1) inadequate support from family and/or friends (lives alone)  
2) severely isolated, alienated estranged from family and/or friends

- Involved and viable indigenous support from family/friends
- Inadequate native support system (lives alone)
- Severely isolated, alienated and/or estranged from family/friends

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## Suicide After Deliberate Self Harm

- 7,968 emergency room DSH patients in Manchester and Salford 9/97 to 8/2001
- 30 fold increase in suicide over gen. pop.
- SMR higher for females than males
- Suicide rates highest 6 months after index DSH
- Predictors of suicide
  - Prevention of discovery of DSH at time of episode
  - Not living with a close relative
  - Previous psychiatric treatment
  - Alcohol misuse
  - Physical health problems

Cooper, Kapur, Webb, Lawlor, Guthrie, Mackway-Jones, and Appleby (2005) American Journal of Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## Suicide and Normal Adolescents

- Risk and Protective Factors in Suicidal and Non-suicidal High School Students
- Risk Factors
  - Life Stress
  - Depression
- Protective Factors
  - Family Cohesion
  - Friendships

Rubenstein JL, Heeren T, Housman D, Rubin C, Stechler (1989) American Journal of Orthopsychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## Item I – Professional / Spiritual

I. Spiritual or  
Professional Supp

---

0) adequate engagement with spiritual or professional support  
1) marginal engagement with spiritual or professional support  
2) significant alienation from professional or spiritual support

- Adequate engagement with spiritual or professional support system
- Marginal/minimal engagement with spiritual or professional support system
- Significant

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## Suicide After Discharge

- 234 patients who died within 1 year of hospital discharge, matched for age, gender, diagnosis and admission period with 431 controls
- Odds ratios using multiple logistic regression

King, Baldwin, Sinclair, Baker, Campbell, & Thompson, (2001) British Journal of Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## Seven Inpatient Risk Factors

- Multiple Logistic Regression using 59 inpatient suicides and 106 case-matched controls
- Seven Factors
  - history of deliberate self-harm
  - admission under the Mental Health Act,
  - involvement of the police in admission
  - depressive symptoms
  - violence towards property
  - going absent without leave
  - significant care professional being on leave
- Unlike outpatients – social factors not significant

King, Baldwin, Sinclair, and Campbell (2001) British Journal of Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

## Suicide After Discharge

King, Baldwin, Sinclair, Baker, Campbell, & Thompson, (2001) British Journal of Psychiatry

- Risk Factors
  - living alone
  - history of deliberate self-harm (DSH)
  - in-patient DSH
  - suicidal ideation precipitating admission
  - hopelessness
  - admission under different consultant
  - onset of relationship difficulties
  - loss of job
  - unplanned discharge
  - significant care professional leaving/on leave

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## Suicide after Discharge

- Protective Factors
  - shared accommodation
  - continuity of contact
- Conclusions
  - Continuity of contact may reduce suicide risk
  - Discontinuity of care from a significant professional is associated with increased risk of suicide

King, Baldwin, Sinclair, Baker, Campbell, & Thompson, (2001) British Journal of Psychiatry

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## Item J – Employment / Academic

J. Employment/  
Economic/  
Academic

0) adequately employed/ financially stable	1) inadequate employment/ financial instability	2) recently or chronically unemployed/ severe economic instability
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- Adequately employed / adequately engaged in academic work/school
- Underemployment / financial instability
- Recently or chronically unemployed / severe economic instability

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## Alcoholism and Suicide

- 82 suicides, 106 live pop alcoholics, 142 clinical alcs
- Seven non-acute clinical/historical risk factors
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Murphy, Wetzel, Robins, and McEvoy (1992) Archives of General Psychiatry

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## Protective Factors - Adolescents

- Emotional well-being
- Perceived parent-family connectedness
- Third protective factor varied for different groups
  - Males
    - high parental expectations for school achievement
    - High GPA
    - more people living in the household
    - religiosity
  - Females
    - emotional well being
    - availability of counseling services at school
    - parental presence at key times during the day

Borowsky, Ireland, and Resnick (2001) Pediatrics

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## Item K – History of Suicidality

K. Suicide History 0) no history of attempt or prior ideation or DSH 1) prior ideation w/o attempt (no information) / some hx of DSH 2) prior suicide attempt or recurrent and/or suicidal ideation/recurrent DSH

- No prior history of para-suicide, ideation or DSH
- History of ideation w/o attempt or some DSH (no information)
- History of suicide attempted (para-suicide), or recurrent and serious DSH

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## Suicidal Ideation in Adults

Vilhjalmsson, Sveinbjarnardottir, Kristjansdottir (1998) Factors associated with suicide ideation in adults. *Social Psychiatry and Psychiatric Epidemiology* 33:3 97-103

- Data from 825 adults - Reykjavik
  - financial hardship
  - legal stress
  - family difficulties
  - stress perceptions
  - low material support
  - frequent alcohol use
  - Depression
  - Anxiety
  - Hopelessness
  - pain
  - low self-esteem
  - external locus of control (low sense of mastery)
  - No significant sociodemographic factors

Raymond Nelson (2005). Please do not reproduce without permission.

## Parasuicide - General Population

Welch (2001) *Psychiatric Services*

- Lit Review of 20 studies
- Annual rates from 2.6 to 1,100 per 100,000
- Lifetime prevalence ranges from 720 to 5,930 per 100,000
- Risk Factors
  - younger age and
  - female gender
  - single or divorced
  - unemployed
  - recent change in living situation
  - mental disorder
  - previous para-suicide incident

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## Reducing Para-suicide

- Para-suicide is a major risk for completed suicide
- Affects 4 to 5 percent of population
- Systemic Approach
  - case registries,
  - evaluating the quality of care for parasuicidal persons
  - evaluating training in empirically supported tx
  - ensuring fidelity to treatment models,
  - evaluating treatment outcomes
  - identifying local programs for evaluation
  - providing infrastructural supports to clinicians
  - implementing quality improvement projects

Comtois (2002) *Psychiatric Services*

Raymond Nelson (2005). Please do not reproduce without permission.

## Item L – Bereavement

L. Bereavement 0) none 1) recent death of friend or relative 2) suicide of relative or friend

- No history of bereavement
- Recent death of close friend or relative
- Suicide of close friend or relative

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## Five Inpatient Risk Factors

- Case – control design (112 inpatient suicides and random control selection)
  - planned or actual suicide attempt
  - recent bereavement
  - presence of delusions
  - chronic mental illness
  - family history of suicide
- 2 suicided patients had *predicted* risk over 5%
- Notes limited utility due to low specificity and sensitivity and low rates of suicide
  - 13.7 (95% CI 11.7-16.1) per 10 000 admissions

Powell, Geddon, Hawton (2000) The British Journal of Psychiatry

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## Maternal Suicide

- Children of mother reporting suicide attempts showed a higher risk for suicidal thoughts and suicide attempts and a tendency toward suicide attempts at an earlier age
  - Associations were similar for male and female subjects
  - Maternal suicidality was roughly stable with control for maternal comorbid psychopathology
  - Suicidality may run in families, independent of depression and other psychopathology
- Lieb, Bronisch, Höfler, Schreier, and Wittchen (2005) American Journal of Psychiatry

Raymond Nelson (2005). Please do not reproduce without permission.

**Structured Suicide Risk Assessment Checklist**

Name: \_\_\_\_\_ D.O.B.: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Location: \_\_\_\_\_

Check All That Apply:  Suicidal Ideation  Suicide Attempt  Suicidal Thoughts  Suicide Risk  Suicide History  Suicide Risk  Suicide Risk  Suicide Risk

**Identifying Information**

**Date time and location**

**Conditions of assessment**

**Antecedent conditions**

**Description of incident**

**Summary of Factors (score circled items above, then circle total and estimated risk level)**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

**Estimated Low Risk**      **Estimated Moderate Risk**      **Estimated High Risk**

maintain contact/continue       contact for safety       case staffing

maintain contact/continue       contact for safety       case staffing

maintain contact/continue       contact for safety       case staffing

(completed by) \_\_\_\_\_ (date) \_\_\_\_\_ (reviewed by) \_\_\_\_\_ (date) \_\_\_\_\_

Raymond Nelson (2005). Please do not reproduce without permission.

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Name: \_\_\_\_\_ D.O.B.: \_\_\_\_\_

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maintain contact/continue       contact for safety       case staffing

(completed by) \_\_\_\_\_ (date) \_\_\_\_\_ (reviewed by) \_\_\_\_\_ (date) \_\_\_\_\_

- Score item totals (non-normed)
- Estimate level of risk
- Specify action plans
- Seek review with another professional
- Provide and arrange for support and assistance

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## Preventing Suicide

- Improve social and professional support systems
- Improve self-efficacy
- Identify reasons for living
- Reduce isolation, alienation, and loneliness
- Identify and treat mental health disorders
- Treat depression, bipolar, and schizophrenia
- Use medications accurately
- Take ideation seriously
- Reduce para-suicide risks
- Prevent access to firearms

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## ***Suicide Risk - Take Home Points***

- Suicide is preventable
- All suicides may not be preventable
- Many risk factors are identifiable
- Lack of ideation does not mean no risk
- Risk prediction remains speculative
- Treat each case phenomenologically
- Ideation/attempt is not simply a cry for help
- Tests don't make decisions – people do

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## ***Thank You***

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