Suicide risk assessment with military personnel

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The problem of military suicide...

- fearlessness about death
- fatalism
- limited decisional control
- self-sacrifice
- self-reliance
- mental toughness
Fluid Vulnerability Theory

- Baseline risk varies from individual to individual
- Baseline risk is determined by static factors
- Baseline risk is higher for multiple attempters (2 or more attempts)
  - More severe, enduring crises w/ precipitant
  - More frequent, severe, enduring crises w/o precipitant
  - More frequent instrumental behaviors/acts
- Risk is elevated by aggravating factors
- Severity of risk is dependent on baseline level and severity of aggravating factors

(Rudd, 2006)
Fluid Vulnerability Theory

• Risk is elevated by aggravating factors for limited periods of time (hours, days, weeks)
  – Risk resolves when *aggravating* factors effectively targeted
  – Risk returns to baseline level only
  – Modifying baseline risk requires long-term treatment not just symptom resolution (Axis I)

• Risk is reduced by protective factors

• Multiple attempters have fewer available protective factors (support, interpersonal resources, coping/problem-solving skills, cognitive, treatment hx)

(Rudd, 2006)
**Predispositions**
- Prior suicide attempts
- Abuse history
- Impulsivity
- Genetic vulnerabilities

**Trigger**
- Job loss
- Relationship problem
- Financial stress

**Behavior**
- Substance abuse
- Social withdrawal
- Nonsuicidal self-injury
- Rehearsal behaviors

**Cognition**
- "I’m a terrible person."
- "I’m a burden on others."
- "I can never be forgiven."
- "I can’t take this anymore."
- "Things will never get better."

**Emotion**
- Shame
- Guilt
- Anger
- Anxiety
- Depression

**Physiology**
- Agitation
- Sleep disturbance
- Concentration problems
- Physical pain

**Suicidal Mode**
Manifestations of the Suicidal Mode

Symptoms
- Depression
- Hopelessness
- Anxiety
- Suicidal thoughts
- Shame
- Anger

Skills deficits
- Problem solving
- Emotion regulation
- Distress tolerance
- Interpersonal skills
- Anger management

Maladaptive traits
- Self-image
- Interpersonal relations
- Impulsivity (Trauma)

(Rudd, 2001)
Table 4. Factors Associated With an Increased Risk for Suicide

<table>
<thead>
<tr>
<th>Psychosocial features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent lack of social support (including living alone)</td>
</tr>
<tr>
<td>Unemployment</td>
</tr>
<tr>
<td>Drop in socioeconomic status</td>
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<tr>
<td>Poor relationship with family&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Domestic partner violence&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Recent stressful life event</td>
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<table>
<thead>
<tr>
<th>Childhood traumas</th>
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<tbody>
<tr>
<td>Sexual abuse</td>
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<td>Physical abuse</td>
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<thead>
<tr>
<th>Genetic and familial effects</th>
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<tbody>
<tr>
<td>Family history of suicide (particularly in first-degree relatives)</td>
</tr>
<tr>
<td>Family history of mental illness, including substance use disorders</td>
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<table>
<thead>
<tr>
<th>Psychological features</th>
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</thead>
<tbody>
<tr>
<td>Hopelessness</td>
</tr>
<tr>
<td>Psychic pain&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Severe or unremitting anxiety</td>
</tr>
<tr>
<td>Panic attacks</td>
</tr>
<tr>
<td>Shame or humiliation&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Psychological turmoil&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Decreased self-esteem&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Extreme narcissistic vulnerability&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Behavioral features</td>
</tr>
<tr>
<td>Impulsiveness</td>
</tr>
<tr>
<td>Aggression, including violence against others</td>
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<tr>
<td>Agitation</td>
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<tr>
<th>Cognitive features</th>
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<tbody>
<tr>
<td>Loss of executive function&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Thought constriction (tunnel vision)</td>
</tr>
<tr>
<td>Polarized thinking</td>
</tr>
<tr>
<td>Closed-mindedness</td>
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<table>
<thead>
<tr>
<th>Demographic features</th>
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<tbody>
<tr>
<td>Male gender&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Widowed, divorced, or single marital status, particularly for men</td>
</tr>
<tr>
<td>Elderly age group (age group with greatest proportionate risk for suicide)</td>
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<tr>
<td>Adolescent and young adult age groups (age groups with highest numbers of suicides)</td>
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<tr>
<td>White race</td>
</tr>
<tr>
<td>Gay, lesbian, or bisexual orientation&lt;sup&gt;b&lt;/sup&gt;</td>
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<table>
<thead>
<tr>
<th>Additional features</th>
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<tbody>
<tr>
<td>Access to firearms</td>
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<tr>
<td>Substance intoxication (in the absence of a formal substance use disorder diagnosis)</td>
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<tr>
<td>Unstable or poor therapeutic relationship&lt;sup&gt;a&lt;/sup&gt;</td>
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Proximal vs. Distal Risk Factors
Multiple Attempt Status

- Three distinct groups:
  - Suicide ideator: Zero previous attempts
  - Single attempter: One previous attempt
  - Multiple attempter: 2 or more previous attempts

(Rosenberg et al, 2005; Rudd, Joiner, & Rajab, 1996; Wingate et al, 2004)
Multiple Attempters

Survival Curves for Days until First Suicide Attempt by Attempter Status (Single v. Multiple)
Multiple Attempters

Total Number of Subsequent Suicide Attempts by Single v. Multiple Attempters

FREQUENCY

SSA

MSA

(n = 47)

(n = 130)

4

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WE MAKE LIVES BETTER

HEALTH SCIENCE CENTER
SAN ANTONIO
Key Risk Assessment Areas

- Static variables
  - Predispositions to suicide
  - Previous suicide attempts
  - Impulsivity

- Aggravating variables
  - Precipitant/stressor
  - Symptomatic presentation
  - Hopelessness
  - Nature of suicidal ideation

- Protective variables

(Rudd, Joiner, & Rajab, 2001; Bryan & Rudd, 2006)
Static Variables (Baseline Risk)

• Predispositions to suicide
  – Past psychiatric diagnoses
  – History of abuse (esp. physical or violent)
  – HPA axis hyperactivity (chronic depression, agitated depression)
  – Genetics (e.g., family history)

• Past suicidal behaviors

• Impulsivity
  – Antisociality
  – Negative urgency
  – Misconceptions about “impulsivity”
Aggravating Variables (Acute Risk)

- Precipitant / triggering event
  - Perceived loss – relation with belongingness

- Symptomatic presentation
  - Depressed mood
  - Hopelessness
  - Perceived burdensomeness
  - Guilt and shame
  - Agitation
  - Insomnia (nightmares particularly important)
  - Cognitive constriction / info processing deficits
Aggravating Variables (Acute Risk)

- Nature of suicidal thinking
  - Resolved plans & preparation
  - Suicidal desire & ideation

RPP
- Sense of courage
- Availability of means
- Opportunity
- Specificity of plan
- Duration of suicidal ideation
- Intensity of suicidal ideation

SDI
- Reasons for living
- Wish for death
- Frequency of ideation
- Desire and expectancy
- Lack of deterrents
- Suicidal communication
Aggravating Variables (Acute Risk)

• Nature of suicidal thinking
  – Suicidal intent: subjective vs. objective

  **Objective**
  - Isolation
  - Likelihood of intervention
  - Preparation for attempt
  - Planning
  - Writing a suicide note

  **Subjective**
  - Self-report of desired outcome
  - Expectation of outcome
  - Wish for death
  - Low desire for life
Aggravating Variables (Acute Risk)

**Intent**
- Self-report of desired outcome
- Expectation of outcome
- Wish for death
- Low desire for life

**Objective**
- Sense of courage
- Availability of means
- Preparedness for attempt
- Specificity of plan
- Writing of suicide note
- Intensity of suicidal ideation

**Subjective**
- Reasons for living
- Desire for death
- Lack of deterrents
- Suicidal communication

**Ideaion**
- Sense of courage
- Availability of means
- Preparedness for attempt
- Specificity of plan
- Writing of suicide note
- Intensity of suicidal ideation

**Aggravating Variables (Acute Risk)**
- Sense of courage
- Availability of means
- Specificity of plan
- Duration of suicidal ideation
- Intensity of suicidal ideation
- Reasons for living
- Desires for death
- Lack of deterrents
- Suicidal communication
Proximal vs. Distal Risk Factors

- Depression
- Hopelessness
- Burdensomeness
- Suicidal ideation
- RPP
- Suicidal Behaviors
Hierarchical Approach

- **Precipitant:** Can you tell me about what triggered things for you? Is there anything in particular that happened that triggered thoughts about suicide?

- **Symptomatic Presentation:** Tell me about how you've been feeling lately? It sounds like you've been feeling depressed? Have you been feeling anxious, nervous or panicky? Have you been down, low or blue lately? Have you had trouble sleeping [additional symptoms of depression and anxiety]?

- **Hopelessness:** It's not unusual for someone that's been feeling depressed to feel hopeless, like things won't change or get any better. Do you ever feel that way?

- **Morbid ruminations:** It's not unusual when you're feeling depressed and hopeless to have thoughts about death and dying. Do you ever think about death or dying?

- **Suicidal Thinking:** It's not unusual when feeling depressed, hopeless and having thoughts about death and dying to have thoughts about suicide. Have you ever thought about suicide?
Sequencing

- Normalize experiences and symptoms
- Increase intensity and sensitivity of information
- Repeat questions with increased specificity
- Decrease patient’s discomfort
- Increase accuracy of self-report
- Minimize missed information

(Shea, 2002)
Sequencing: Overview

Presenting problem / current ideation

Past suicidal episodes
(First, worst, most recent)

Current suicidal episode
Assess multiple attempt status

• How many times have you tried to kill yourself?
• Tell me the story of the first time you tried to kill yourself.
  – When did this occur?
  – What did you do?
    • How many pills did you take? 50? 100? 150?
  – Where were you when you did this?
  – Did you tell anyone you were going to do this?
  – Did you hope you would die, or did you hope something else would happen?
  – What did you do next?
  – Afterwards, were you glad to be alive or disappointed you weren’t dead?
• Let’s talk about the time [x] years ago… [Repeat]
Risk Decision Tree

Any RPP symptoms?
- No
- Yes
  - 2 or more RPP?
    - No
    - Yes
      - Any other risk factor?
        - No
        - Yes
          - Can outpatient safety be maintained?
            - Yes
            - No
              - EXTREME
                - Hospitalization indicated
            - No
              - SEVERE
                - Increase strategies for moderate risk
                - Frequent re-evaluations for hospitalization
          - No
            - MODERATE
              - Increase strategies for moderate risk
              - Crisis response plan
              - Increase appt freq &/or time
              - Phone contacts
              - Input/involvement of family
              - Frequent re-evaluations
            - No
              - MILD
                - No implicated changes to outpatient treatment
              - Yes
                - NOT ELEVATED
                  - No implicated changes to outpatient treatment

Is the patient a multiple attempter (2 or more suicide attempts)?
- No
- Yes
  - Any RPP symptoms?
  - Any SDI symptoms?
    - No
    - Yes
      - 2 or more SDI and any 2 risk factors?
        - No
        - Yes
          - MILD
            - No implicated changes to outpatient treatment
          - MODERATE
            - High interest log
            - Crisis response plan
            - Increase appt freq &/or time
            - Phone contacts
            - Input/involvement of family
            - Frequent re-evaluations
          - SEVERE
            - Increase strategies for moderate risk
            - Frequent re-evaluations for hospitalization
          - EXTREME
            - Hospitalization indicated
  - No
    - How many RPP and/or SDI symptoms?
      - Zero
      - One
      - 2 or more
## Indicated clinical responses

<table>
<thead>
<tr>
<th>Risk level</th>
<th>Response</th>
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<tbody>
<tr>
<td>Not elevated to mild</td>
<td>- No particular changes in tx.</td>
</tr>
<tr>
<td></td>
<td>- Continue to monitor change in risk.</td>
</tr>
<tr>
<td>Moderate</td>
<td>- Recurrent re-evaluation of suicide risk for changes in tx plan and/or need for hospitalization</td>
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<td></td>
<td>- Increase in frequency / duration of outpatient visits</td>
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<td></td>
<td>- Active involvement of the family</td>
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<td></td>
<td>- 24-hour availability of emergency or crisis services</td>
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<td></td>
<td>- Note specific changes that reduce or elevate risk</td>
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<tr>
<td></td>
<td>- Consideration of medication</td>
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<tr>
<td></td>
<td>- Use of telephone contacts for monitoring</td>
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<tr>
<td></td>
<td>- Frequent input from family members</td>
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<tr>
<td></td>
<td>- Professional consultation as indicated</td>
</tr>
<tr>
<td>Severe</td>
<td>- Evaluation for inpatient hospitalization</td>
</tr>
<tr>
<td></td>
<td>- Increase strategies for moderate risk</td>
</tr>
<tr>
<td>Extreme</td>
<td>- Hospitalization</td>
</tr>
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(Rudd, Joiner, & Rajab, 2001; Bryan & Rudd, 2006)
Means Restriction Counseling
“We were out on patrol all day. It was hotter than hell like usual. I was up in the turret, we had been out for like 12 hours or something, and nothing was happening, and that’s when I first thought about it. I just saw myself holding my gun to my head and pulling the trigger. And I just couldn’t stop thinking about it after that.

...We got back to the FOB and we dismounted, and I just jumped down to the ground and put the M-16 under my chin and pulled the trigger. I don’t know why I did it. It just seemed like the thing to do. My buddies came running and tackled me and took the gun away.

...I promise I won’t do it again. Just don’t send me back home. It was stupid of me. I swear I won’t do it again.”
Means Restriction Counseling

“Treatment is not effective with dead patients”

2 distinct interrelated actions:

1. Assessing whether a person at risk for suicide has access to a firearm or other lethal means
2. Working w/ them and their family & support system to limit their access until they are no longer feeling suicidal
Means restriction counseling is one of the only suicide prevention strategies that has consistently been found to reduce suicide death rates

“Where the method is common, restriction of means has led to lower overall suicide rates.”

(p. 2010, Mann et al., 2005)
Means Restriction Effectiveness

• Reducing access to lethal methods for suicide reduces suicide rates by that method:
  – **Firearms** (Beautrais, 2000; Beautrais et al., 2006; Leenaars et al., 2003; Loftin et al., 1991)
  – **Carbon monoxide** (Nordentoft et al., 2006)
  – **Barbiturates** (Nordentoft et al., 2006)
  – **Pesticides** (Gunnell et al., 2007)
Means Restriction Counseling Effectiveness

- Of those patients or parents who receive means restriction counseling following a suicide attempt (vs. no counseling):
  - 86% vs. 32% lock up/dispose of medications (McManus et al., 1997)
  - 75% vs. 48% removed prescription meds
  - 48% vs. 22% removed OTC meds
  - 47% vs. 11% restricted alcohol access
  - 63% vs. 0% removed firearm (Kruesi et al., 1999)
Means Restriction Counseling Effectiveness

The odds of a subsequent suicide attempt via overdose was reduced 5-fold among patients who had medication access restricted

(McManus et al., 1997)
Means Restriction Counseling

Critical components:

• Presence of a firearm in the home increases the chance that a suicide attempt will be fatal

• Because suicidal desire can increase very rapidly, restricting access to lethal means can reduce the likelihood of bad outcomes in a crisis

• Recommend removing firearms & other lethal means

• For firearms, safest option is complete removal
Means Restriction Counseling

Critical components:

• If complete removal of firearm is not possible, other options for storage include:
  – Unloaded in a tamper-proof safe
  – Lock ammunition separately
  – Ensure keys, combinations cannot be circumvented

• Hiding a firearm is not sufficient

• For children, ensure all parents with custody are aware of recommendations
# Means Receipt

**Means Receipt**

Questions? Contact your provider: **Dr. Bryan 222-222-2222**  
Emergencies call: 911

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>John Doe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support’s Name:</td>
<td>Jane Doe</td>
</tr>
<tr>
<td>Support’s Address:</td>
<td>1234 Main St.</td>
</tr>
<tr>
<td>Support’s Email:</td>
<td><a href="mailto:Jane.doe@email.com">Jane.doe@email.com</a></td>
</tr>
<tr>
<td>Support’s Phone:</td>
<td>555-555-5555</td>
</tr>
<tr>
<td>Type of means:</td>
<td>Firearm</td>
</tr>
<tr>
<td>Safety Measures:</td>
<td>Removed from home; stored with parent in safe</td>
</tr>
<tr>
<td>Release Terms:</td>
<td>Upon written verification by medical provider</td>
</tr>
<tr>
<td>Support’s signature:</td>
<td>(To be signed upon completion of means restriction)</td>
</tr>
</tbody>
</table>

*(Bryan, Rudd, & Stone, 2011)*

(UT Health Science Center, San Antonio)
Brief Cognitive Behavioral Therapy (BCBT)
Phase I:
Crisis management, distress tolerance

Phase II:
Cognitive restructuring of suicidal belief system, problem solving, cognitive flexibility

Phase III:
Relapse prevention
<table>
<thead>
<tr>
<th>TAU ((n = 75))</th>
<th>BCBT ((n = 75))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide as symptom of psychiatric dx</td>
<td>Suicide as problem distinct from psych dx</td>
</tr>
<tr>
<td>Focus on psych dx</td>
<td>Focus on suicide risk</td>
</tr>
<tr>
<td>Emphasizes external sources of self-mgt, including hospitalization</td>
<td>Emphasizes internal sources of self-mgt to minimize hospitalization</td>
</tr>
<tr>
<td>Clinician responsibility for preventing suicide</td>
<td>Shared patient-clinician responsibility for preventing suicide</td>
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Early Observations

- Service members take numerous medications
- Providing patients with treatment log (or “smart book”) is highly effective method for obtaining buy-in, skills training, and relapse prevention
- Framing treatment as occupational skills training
- Phase I must target emotion regulation
- Guilt/shame are common themes & targets of Phase II
- BCBT appears to retain patients at a higher rate
- Combat exposure and trauma are distal contributory factors
Questions?

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bryanc3@uthscsa.edu