Suicide Risk Assessment: Short-Term and Indirect Indicators of Suicide Risk

Megan L. Rogers, PhD
Postdoctoral Research Fellow
Mount Sinai Beth Israel

Pennsylvania Psychological Association
June 19, 2021

Overview

- Overview and limitations of **traditional suicide risk assessments**.
- Introduction to **indirect** and **proximal** indicators of suicide risk.
- Overview of **acute suicidal crises**.
- Suicide risk **management** and **intervention**.
- Applications to **diverse populations**.

Who is here today?

- Who do we have here in the audience today?
- What is your experience and comfort level with suicide risk assessment?

Prevalence Rates

Suicide is the **10th** leading cause of death

Each year **47,000+** Americans die by suicide

For every death **25** attempts

Centers for Disease Control and Prevention (CDC), 2019

Traditional Suicide Risk Assessment

- Columbia-Suicide Severity Rating Scale
- Beck Scale for Suicide Ideation
- Scale for Suicide Ideation
- Suicidal Intent Scale
- Suicidal Behaviors Questionnaire-Revised
- Suicide Probability Scale
- Adult Suicide Ideation Questionnaire
- Self-Harm Behaviors Questionnaire
- Self-Injurious Thoughts and Behaviors Interview
- …just to name a few!

Table 3: Columbia-suicide severity rating scale Screen with Triage Points for Primary Care (C-SSRS)	Past month	
Ask questions that are in bold and underlined.	YES	NO
Ask questions 1 and 2		
Wish to be dead: Subject endorses thoughts about a wish to be dead or not alive anymore or wish to fall asleep and not wake up. **Have you wished you were dead or wished you could go to sleep and not wake up?**		
Non-specific active suicidal thoughts: General non-specific thoughts of wanting to end one's life/die by suicide (e.g., "I've thought about killing myself") without thoughts of ways to kill oneself/associated methods, intent, or plan during the assessment period **Have you had any actual thoughts of killing yourself?**		
If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6		
Active suicidal ideation with any methods (Not Plan) without intent to act: Subject endorses thoughts of suicide and has thought of at least one method during the assessment period. This is different than a specific plan with time, place or method details worked out (e.g., thought of method to kill self but not a specific plan). Includes person who would say, "I thought about taking an overdose but I never made a specific plan as to when, where or how I would actually do it… and I would never go through with it." **Have you been thinking about how you might do this?**		
Active suicidal ideation with some intent to act, without specific plan: Active suicidal thoughts of killing oneself and subject reports having some intent to act on such thoughts, as opposed to "I have the thoughts but I definitely will not do anything about them." **Have you had these thoughts and had some intention of acting on them?**		
Active suicidal ideation with specific plan and intent: Thoughts of killing oneself with details of plan fully or partially worked out and subject has some intent to carry it out. Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?		
Past 3 months		
Suicidal behavior: Have you ever done anything, started to do anything, or prepared to do anything to end your life? Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc.		
Mild suicide risk Moderate suicide risk Severe suicide risk		

Source: Posner K., Brent D., Lucas C., Gould M., Stanley B., Brown G., et al. Columbia-suicide severity rating scale (C-SSRS). Screener with triage for primary health settings. The Research Foundation for Mental Hygiene, Inc. 2008. Available from: http://cssrs.columbia.edu/the-columbia-scale-c-ssrs/cssrs-for-communities-and-healthcare/#filter-.general-use.english Free PDF download.

Posner et al., 2011

Limitations to Reliance on Assessing Suicidality

1. Prior suicidal thoughts and behaviors **poorly predict** future suicidal thoughts and behaviors

Many adults think about suicide or attempt suicide

12 million
Seriously thought about suicide

3.5 million
Made a plan for suicide

1.4 million
Attempted suicide

- **Suicidal Ideation** is a relatively weak predictor of future suicide attempts (OR = 1.88) and deaths (OR = 1.95)
- **Suicide Attempt Histories** are stronger, but still relatively weak, predictors of future suicide attempts (OR = 3.61) and deaths (OR = 2.03)

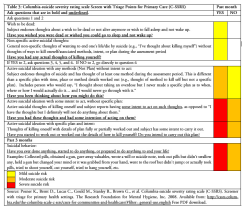
CDC, 2019; Ribeiro et al., 2016

Limitations to Reliance on Assessing Suicidality

1. Prior suicidal thoughts and behaviors **poorly predict** future suicidal thoughts and behaviors

"…about half of patients who die by suicide within a month, and fewer than half who die within a year, score positive even at the optimal C-SSRS Screener cutoff…"

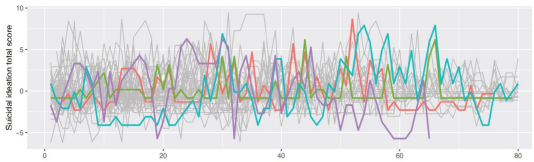
"…the [C-SSRS] Screener should not be used to guide provision of any psychiatric services in emergency settings…"



Simpson, Loh, & Goans, 2021

Limitations to Reliance on Assessing Suicidality

2. Suicidal ideation can **fluctuate rapidly** (leading to recall biases) and can **escalate rapidly** (leading to attempts)



- In one study, **58%** of participants who reported suicidal ideation using real-time monitoring denied any past-week suicidal ideation on a retrospective measure

Gratch et al., 2021; Kleiman et al., 2017; Millner et al., 2017

Limitations to Reliance on Assessing Suicidality

3. Many individuals choose **not to disclose** suicidal ideation or intent when it is present
   - **Up to 75%** of patients and community members who died by suicide **explicitly denied suicidal ideation or intent** during their final communications
   - **Approximately half** of those who report lifetime suicidal ideation **deny ever telling anyone**
   - Rates of nondisclosure may be **higher among certain high-risk groups** (e.g., military service members/Veterans, sexual minority and gender diverse individuals, older adults)

Berman, 2018; Busch et al., 2003; Drum et al., 2009; Eskin et al., 2015; Podlogar & Joiner, 2020; Stone et al., 2018

Knowing whether someone has suicidal ideation is very clinically informative and useful for decision-making and subsequent intervention (suicidal ideation by itself is a worthy intervention target).

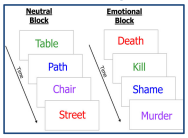
However, it should not be solely relied upon.

Introduction to Indirect and Proximal Indicators of Suicide Risk

Indirect Assessments

Death/Suicide IAT

Suicide Stroop Task



Machine Learning

Interview and self-report methods remain the most accessible, rapid, cost-effective, and prevalent methods of suicide risk screening and assessment

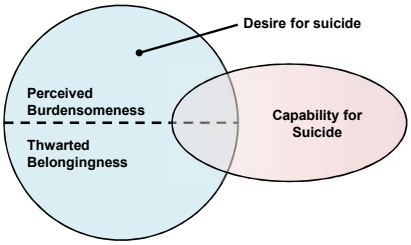
Cha et al., 2010; Nock et al., 2010; Walsh et al., 2019

Indirect Assessments

- Interpersonal factors
- Cognitive-affective factors
- Capability for suicide
- Stressful life events
- Hyperarousal and acute affective states

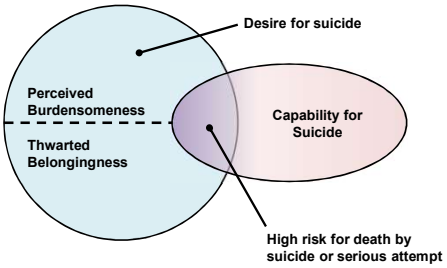
Chu et al., 2015; Ribeiro et al., 2013

Interpersonal Theory of Suicide



Chu et al., 2017; Joiner, 2005; Van Orden et al., 2010

Interpersonal Theory of Suicide



Chu et al., 2017; Joiner, 2005; Van Orden et al., 2010

Interpersonal Factors

- **Perceived Burdensomeness**
  - *"People in my life would be better off if I were gone"*
  - *"Other people would be happier with me"*
  - *"I'm useless and worthless"*
- **Thwarted Belongingness**
  - *"I don't feel connected to others"*
  - *"I'm lonely"*
  - *"I don't have anyone to turn to in times of need*

Interpersonal Factors

What **distal risk factors** might these explain?

Perceived Burdensomeness

- Psychiatric disorders
- Physical illness
- Unemployment
- Older age
- Homelessness
- Incarceration

Thwarted Belongingness

- Social isolation
- Interpersonal conflict
- Psychiatric disorders
- Older age
- Shame

Interpersonal Factors

How might you **assess** for these risk factors?

Perceived Burdensomeness	Thwarted Belongingness
Interview: *"Sometimes people think, 'the people in my life would be better off if I were gone.' Do you think that?"* *"Do you ever feel like a burden on others?"*	**Interview:** *"Do you feel connected to other people?"* *"Do you live alone?"* *"Do you have someone you can call when you're feeling badly? Who is that?"*

Capability for Suicide

- Ability to **overcome** evolutionary **instinct for self-preservation** to enact lethal self-harm
  - Fearlessness about pain, death, and suicide
  - Physical pain tolerance
- **Knowledge about** and **Access to Lethal Means**
  - Familiarity with preferred method
  - Physical proximity to means
  - Cognitive accessibility of means



Capability for Suicide

What **distal risk factors** might contribute to capability?

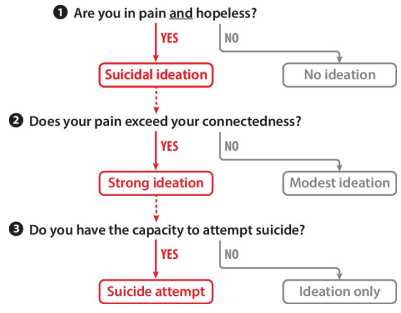
Capability for Suicide
- Previous suicide attempt(s)
- Family history of suicide
- Combat exposure
- Childhood abuse
- Chronic pain


Capability for Suicide

How might you **assess** for capability for suicide?

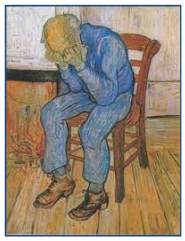
Fearlessness/Pain Tolerance	Knowledge/Access to Means
Interview: *"Do you feel confident you could attempt suicide if you wanted to?"* *"Do you feel afraid to die?"* *"Are you able to persist through a lot of pain?"*	**Interview:** *"Have you acquired means for use in a suicide attempt [pills, a gun, etc.]?"* *"How comfortable are you with _____?"* *"How physically close are you typically to _____?"*

Three-Step Theory of Suicide



Klonsky & May, 2015; Klonsky, May, & Saffer, 2016

Cognitive-Affective Factors



- **Psychological Pain**
  - *"I'm in so much pain"*
  - *"I feel terrible all of the time"*
  - *"Life is just an endless string of suffering"*
- **Hopelessness**
  - *"Things will never get better"*
  - *"I don't have any hope left in me"*
  - *"This is how it always has been and how it will always be"*

Cognitive-Affective Factors

How might you **assess** for these factors?

Psychological Pain

Interview:
"Do you feel a lot of emotional pain?"
"How have you been feeling lately?"
"Does your emotional pain affect other areas of your life?"

Hopelessness

Interview:
"Do you feel hopeless? Tell me more about that"
"How likely is it that things will get better?"
"Is this permanent or something that will change over time?"

Cognitive-Affective Factors

- **Ruminative/Perseverative Thinking**
  - Tendency to respond to distress by **passively focusing** on the causes and consequences of one's problems or distress **without active problem-solving**
  - Difficulties **disengaging** from negative cognitive and emotional content
  - Has been linked to **suicidal ideation** and **attempts**, especially when **difficult to control**

Nolen-Hoeksema & Miranda, 2007; Rogers & Joiner, 2017; Rogers, Gorday, & Joiner, 2021

Cognitive-Affective Factors

How might you **assess** for rumination/perseverative thinking?

Rumination

Interview:
"Do you tend to get stuck on your thoughts when upset?"
"Do you turn things over and over in your mind?"
"How do you cope when you're feeling badly?"

Stressful Life Events

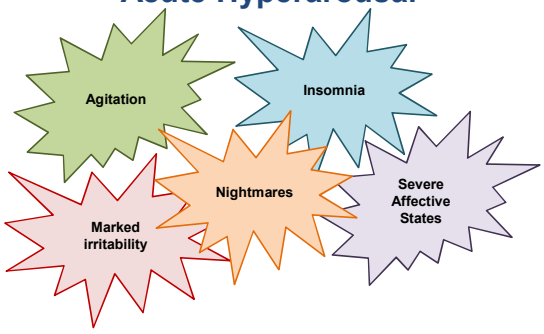
- Associations stronger with **suicide attempts** and **deaths** than with suicidal ideation
- Associations stronger **recently after** the stressful life event
- **Interpersonal** and **financial** stressors particularly relevant

Assessment of Stressful Life Events

Interview:
"Has anything especially stressful happened to you recently?"
"How stressful was that experience?"
"What impact has that experience had on you?

Bagge et al., 2013; Fairweather et al., 2006; Howarth et al., 2020; Liu & Miller, 2014

Acute Hyperarousal



Hendin et al., 2007, 2010; Pigeon et al., 2012; Rogers et al., 2016

Acute Hyperarousal

How might you **assess** for these factors?

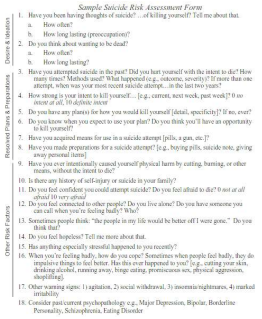
Agitation/Irritability

Interview:
"Do you feel agitated, or like crawling out of your skin?"
"Have little things been setting you off recently?"
"Do you feel extremely restless or on edge?"

Sleep Disturbances

Interview:
"How have you been sleeping lately?"
"Are you having difficulties falling asleep, staying asleep, or waking up too early?"
"Have you been having nightmares?

Putting it all together…


Sample Suicide Risk Assessment Form

Desire & Ideation
1. Have you been having thoughts of suicide? …of killing yourself? Tell me about that.
   a. How often?
   b. How long lasting (preoccupation)?
2. Do you think about wanting to be dead?
   a. How often?
   b. How long lasting?
3. Have you attempted suicide in the past? Did you hurt yourself with the intent to die? How many times? Methods used? What happened (e.g., outcome, severity)? If more than one attempt, when was your most recent suicide attempt…in the last two years?
4. How strong is your intent to kill yourself… [e.g., current, next week, past week]? 0 *no intent at all*, 10 *definite intent*

Resolved Plans & Preparations
5. Do you have any plan(s) for how you would kill yourself [detail, specificity]? If no, *ever*?
6. Do you know when you expect to use your plan? Do you think you'll have an opportunity to kill yourself?
7. Have you acquired means for use in a suicide attempt [pills, a gun, etc.]?
8. Have you made preparations for a suicide attempt? [e.g., buying pills, suicide note, giving away personal items]
9. Have you ever intentionally caused yourself physical harm by cutting, burning, or other means, without the intent to die?

Other Risk Factors
10. Is there any history of self-injury or suicide in your family?
11. Do you feel confident you could attempt suicide? Do you feel afraid to die? 0 *not at all afraid* 10 *very afraid*
12. Do you feel connected to other people? Do you live alone? Do you have someone you can call when you're feeling badly? Who?
13. Sometimes people think: "the people in my life would be better off I were gone." Do you think that?
14. Do you feel hopeless? Tell me more about that.
15. Has anything especially stressful happened to you recently?
16. When you're feeling badly, how do you cope? Sometimes when people feel badly, they do impulsive things to feel better. Has this ever happened to you? [e.g., cutting your skin, drinking alcohol, running away, binge eating, promiscuous sex, physical aggression, shoplifting].
17. Other warning signs: 1) agitation, 2) social withdrawal, 3) insomnia/nightmares, 4) marked irritability
18. Consider past/current psychopathology e.g., Major Depression, Bipolar, Borderline Personality, Schizophrenia, Eating Disorder

Direct Assessment of Suicidal Thoughts and Behaviors

Assessment of Indirect Indicators and Acute Risk

Chu et al., 2015; Gallyer et al., 2020; Joiner et al., 1999

Acute Suicidal Crises

Proposed Suicide-Specific Syndromes

Acute Suicidal Affective Disturbance (ASAD)

- Drastic **increases in suicidal intent**, across hours to days
- Perceptions of **social** and/or **self-alienation**
- **Hopelessness** that the above states will improve
- Two or more **manifestations of overarousal** (agitation, irritability, insomnia, nightmares)

Suicide Crisis Syndrome (SCS)

- Persistent/recurrent feeling of **entrapment**
- **Affective disturbances** (emotional pain, rapid spikes of emotions, extreme anxiety, anhedonia)
- **Loss of cognitive control** (rumination, rigidity, suppression)
- **Hyperarousal** (agitation, hypervigilance, irritability, insomnia)
- **Social withdrawal**

Galynker et al., 2017; Joiner et al., 2018; Rogers et al., 2017, 2019

Proposed Suicide-Specific Syndromes

How might you **assess** for these states?

- Incorporate indices of suicidal crises into standard risk assessments
  - Entrapment, social/self-alienation or withdrawal, hopelessness
  - Look for **behavioral cues of hyperarousal** (e.g., agitation) or **cognitive stuckness** (e.g., perseverative thinking, rigidity)
- Target acute changes in thoughts or behaviors, especially in response to stressors

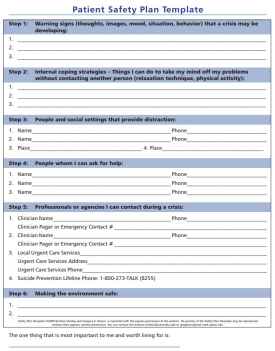
Galynker et al., 2017; Joiner et al., 2018; Rogers et al., 2017, 2019

Suicide Risk Management

Safety Planning

- **Safety plans are:**
  - Collaborative efforts between clinicians and patients that provide people experiencing suicidal ideation/crises with **specific, concrete, personalized strategies** to use to decrease distress and reduce risk of suicidal behavior
  - A **written list of steps** for patients to take during a crisis
- **Safety plans are <u>not</u>:**
  - No-suicide contracts
  - Contracts for safety

Stanley & Brown, 2012


Patient Safety Plan Template

Step 1: Warning signs (thoughts, images, mood, situation, behavior) that a crisis may be developing:
1. _____
2. _____
3. _____

Step 2: Internal coping strategies - Things I can do to take my mind off my problems without contacting another person (relaxation technique, physical activity):
1. _____
2. _____
3. _____

Step 3: People and social settings that provide distraction:
1. Name_____ Phone_____
2. Name_____ Phone_____
3. Place_____ 4. Place_____

Step 4: People whom I can ask for help:
1. Name_____ Phone_____
2. Name_____ Phone_____
3. Name_____ Phone_____

Step 5: Professionals or agencies I can contact during a crisis:
1. Clinician Name_____ Phone_____
Clinician Pager or Emergency Contact #_____
2. Clinician Name_____ Phone_____
Clinician Pager or Emergency Contact #_____
3. Local Urgent Care Services_____
Urgent Care Services Address_____
Urgent Care Services Phone_____
4. Suicide Prevention Lifeline Phone: 1-800-273-TALK (8255)

Step 6: Making the environment safe:
1. _____
2. _____

Safety Plan Template ©2008 Barbara Stanley and Gregory K. Brown. Is reprinted with the express permission of the authors. No portion of the Safety Plan Template may be reproduced without their express, written permission. You can contact the authors at bstanley@nki.rfmh.org or gbrown@mail.med.upenn.edu.

The one thing that is most important to me and worth living for is:
_____

- **Warning Signs:** Thoughts/mood/behavior that may signal impending crisis
- **Coping Strategies:** Things to take mind off problem
- **Distractions:** People and social settings
- **Helpful People:** Friends, family members
- **Professionals:** Therapist, hotline, hospital
- **Safe Environment:** Remove access to lethal means

Stanley & Brown, 2012

Lethal Means Counseling

- Develop a collaborative plan for means safety with patients
- Ask **every patient** about both **access to lethal means** AND **access to firearms**, specifically

How to assess and discuss:

"Have you acquired any means that you would use in a suicide attempt?" "Do you have access to a firearm?"
"Where are [your medications, your firearms] stored?"

Raise the issue: *"When someone is struggling, sometimes suicidal feelings occur and escalate rapidly. We know that these feelings pass, but that it can be tough to think clearly in a crisis, so there are a few steps we recommend to make your environment safer."*

Interventions Targeting Suicidality

- **Dialectical Behavioral Therapy (DBT)**
  - Emotion regulation
  - Distress tolerance
  - Interpersonal effectiveness
  - Mindfulness

- **Collaborative Assessment and Management of Suicidality (CAMS)**
  - Build a strong therapeutic alliance that increases patient motivation
  - Identify and treat drivers for suicide (e.g., agitation, hopelessness, self-hatred, psychological pain)

Jobes, 2006; Linehan, 1993; Swift et al., 2021

Interventions Targeting Suicidality

- **Caring Contacts**

"Dear Matthew,

It has been some time since you were here at the hospital, and we hope things are going well for you. If you wish to drop us a note we would be glad to hear from you."

Caring Letters Study; Motto, 1981

Applications to Diverse Populations

Generalizability across Populations

- Most, if not all, of these factors are generalizable across populations. Adding tailored assessments in unique populations can augment these factors to better assess risk.



Thank you for your attention

Megan L. Rogers, PhD
megan.l.rogers4@gmail.com
@megan_l_rogers