Suicide Risk Assessment and Prevention in Adulthood

Kim Van Orden, PhD
Associate Professor, Department of Psychiatry
University of Rochester Medical Center
Today’s Agenda & Learning Objectives

1. **Epidemiology of suicide**: To describe the most common risk factors for suicide attempts and deaths in primary care

2. **Best practices for suicide risk assessment**: To understand essential components of suicide risk assessment

3. **Risk management strategies**: To identify evidence-based suicide risk management interventions
Epidemiology & Scope of the Problem
Who is most at risk?

Ranks (number of deaths)

CDC Data on the number of suicide deaths in 2018

Adults in the middle years of life (35-64): 24,406

50% of suicide deaths

vs

Young people (10-24): 13,614

28% of suicide deaths
Who is most at risk?

* Rates (number per 100,000)*

- Men are more likely to die by suicide (women are more likely to attempt but survive)
- Rates increase in mid-life and then again in later life, highest rate for white men over 80
  - Cohort effects are key
- Native Americans have markedly elevated rates for youth
Who is most at risk?

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Suicide methods

• In the U.S. most suicide deaths are due to firearms.
• Firearm safety is a key risk management strategy.

Percentage of Suicide Deaths by Method in the United States (2017)

Data Courtesy of CDC

- Female
  - Other: 9.6%
  - Suffocation: 27.9%
  - Poisoning: 31.4%
  - Firearm: 31.2%

- Male
  - Other: 7.3%
  - Suffocation: 27.7%
  - Poisoning: 9.0%
  - Firearm: 56.0%
Past Year Prevalence of Suicide Attempts Among U.S. Adults (2017)
Data Courtesy of SAMHSA

<table>
<thead>
<tr>
<th>Sex</th>
<th>Overall</th>
<th>Female</th>
<th>Male</th>
<th>18-25</th>
<th>26-49</th>
<th>50+</th>
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<th>Al/AN**</th>
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Past Year Prevalence of Suicidal Thoughts Among U.S. Adults (2017)

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Percent
Primary care is a key setting for suicide prevention:

Most individuals who die by suicide are seen in primary care in the weeks and months before their deaths.

Depression is not the only risk factor:

‘Ideation to action’

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Table 1 Survival models of the associations between temporally before lifetime DSM-IV/CIDI disorders and subsequent first occurrence of a suicide attempt

| Response variable: lifetime attempt among total sample (n = 5692) |
|-----------------|-----------------|-----------------|-----------------|
|                 | Bivariate*      | Multivariate additiveb | Multivariate interactivec |
|                 | OR (95% CI)     | χ²               | OR (95% CI)     | χ²               | OR (95% CI)     | χ²               |
| I. Anxiety disorders |                 |                  |                 |                 |                 |                  |
| Panic disorder   | 5.3 (3.8–7.3)*  | 100.3*           | 1.7 (1.1–2.5)*  | 6.6*             | 1.9 (1.3–2.8)*  | 13.4*            |
| GAD              | 4.6 (3.2–6.6)*  | 73.2*            | 1.4 (0.9–2.2)   | 2.1              | 1.6 (1.0–2.6)   | 3.4              |
| Specific phobia  | 2.8 (2.3–3.6)*  | 61.8*            | 1.3 (1.1–1.7)*  | 6.9*             | 1.3 (1.0–1.7)   | 3.4              |
| Social phobia    | 4.1 (3.2–5.5)*  | 148.1*           | 1.9 (1.4–2.5)*  | 17.7*            | 1.8 (1.3–2.6)*  | 13.2*            |
| PTSD             | 5.7 (4.3–7.4)*  | 167.4*           | 1.9 (1.3–2.7)*  | 11.6*            | 2.1 (1.5–2.9)*  | 19.2*            |
| SAD              | 3.3 (2.6–4.2)*  | 91.2*            | 1.2 (0.9–1.6)   | 1.6              | 1.3 (1.0–1.8)   | 3.4              |
| Agoraphobia      | 2.7 (1.6–4.7)*  | 13.5*            | 1.1 (0.6–1.8)   | 0.0              | 1.3 (0.7–2.4)   | 0.6              |
| Any anxiety disorder | 4.6 (3.6–5.7)* | 188.3*           | —               |                  |                  |                  |
| II. Mood disorders |                 |                  |                 |                 |                 |                  |
| MDD              | 5.1 (3.9–6.7)*  | 156.4*           | 2.0 (1.4–2.8)*  | 16.1*            | 2.0 (1.4–3.0)*  | 12.8*            |
| Dysthymia        | 4.9 (3.3–7.1)*  | 71.9*            | 0.8 (0.5–1.3)   | 0.6              | 1.1 (0.7–1.7)   | 0.1              |
| Bipolar disorder | 6.7 (4.6–9.7)*  | 103.3*           | 1.9 (1.3–2.3)*  | 7.5*             | 2.3 (1.5–3.5)*  | 15.4*            |
| Any mood disorder | 5.2 (4.0–6.7)*  | 174.3*           | —               |                  |                  |                  |
| III. Impulse-control disorders |                 |                  |                 |                 |                 |                  |
| ODDd             | 4.8 (3.7–6.2)*  | 149.0*           | 1.7 (1.2–2.3)*  | 10.3*            | 1.7 (1.2–2.3)*  | 10.6*            |
| Conduct disorderd | 4.9 (3.6–6.6)*  | 111.5*           | 1.6 (1.1–2.2)*  | 8.1*             | 1.8 (1.3–2.6)*  | 11.2*            |
| ADHDd            | 4.4 (3.3–6.0)*  | 99.7*            | 1.3 (0.9–1.9)   | 2.6              | 1.5 (1.0–2.2)*  | 4.4*             |
| IED              | 3.3 (2.5–4.5)*  | 69.3*            | 1.4 (1.0–2.0)*  | 5.0*             | 1.5 (1.1–2.1)*  | 6.1*             |
| Any impulse-control disorderd | 4.8 (3.7–6.2)* | 151.0*           | —               |                  |                  |                  |
| IV. Substance use disorders |                |                  |                 |                 |                 |                  |
| Alcohol abuse or dependence | 4.8 (3.6–6.4)* | 120.9*           | 2.1 (1.3–3.1)*  | 11.7*            | 2.2 (1.4–3.4)*  | 11.3*            |
| Drug abuse or dependence | 4.2 (2.8–6.3)* | 52.8*            | 0.9 (0.5–1.6)   | 0.1              | 1.1 (0.7–1.8)   | 0.3              |
| Any substance use disorder | 4.8 (3.6–6.6)* | 109.6*           | —               |                  |                  |                  |
| Any disorder     | 7.0 (5.5–8.9)*  | 280.3*           | —               |                  |                  |                  |

χ²^*^
Why do people take their lives?

People who feel suicidal typically face multiple problems. Risk factors include:

- Drug and alcohol problems
- Depression and other mental illness
- Impulsiveness and aggressiveness
- Family history of suicide
- Parental psychopathology
- Previous attempts
- Recent losses or setbacks
- Feeling hopeless

Feeling hopeless is probably the most common theme.
5 Dimensions of Risk in Later Life

1. Psychiatric illness (primarily depression)
2. Physical illness (multiple comorbid diseases)
3. Access to lethal (deadly) means (e.g., firearms)
4. Social disconnection (isolation, loneliness, family conflict)
5. Disability (functional impairment) & distress over dependency (feeling like a burden)

PART 2

Suicide risk assessment
Why do we use screening tools?

The goal of suicide risk assessment is NOT a prediction about whether a patient will die by suicide.

The goal IS to determine the most appropriate actions to take to keep a patient safe.

We need to take action for all endorsements of suicide ideation, but not the same action for every type of endorsement.
Key Components

2. Gathering information (asking questions).
3. Making sense of the information and organizing it (assessment).
4. Taking actions while meeting with patient (responding/planning).
5. Taking actions after mtg with patient (extending)
The evidence base for these actions

- There are no evidence-based assessment methods for suicide risk (preventing suicidal behavior).
- Only three randomized trials of interventions shown to prevent suicide deaths in the world, ever.
- Psychotherapies & collaborative care models for depression have been shown to reduce the severity (or frequency) of suicidal thoughts and prevent non-lethal suicide attempts.
Definitions

- Types of suicide ideation
  - Passive: wish to be dead
  - Active thoughts of killing yourself
  - Consideration of methods
  - Some intent to act
  - Intent and specific plan (imminent risk)

- Types of suicidal behavior:
  - Suicide attempt (multiple attempts)
  - Interrupted attempt
  - Aborted attempt
  - Preparatory behavior
  - (NSSI)

Definitions from the Columbia Suicide Severity Rating Scale.
Two-step screening

PHQ-9, item 9
- Thoughts that you would be better off dead or of hurting yourself in some way?
- If positive (any >0) → P4 Screener
- Dube et al., J Clin Psychiatry 12:e1-e8, 2010
Columbia Suicide Severity Rating Scale

Semi-structured interview
- Flexible: suggested prompts, goal is to get the info you need; don’t need to ask questions you don’t need.
- Also self-report version

Benefits:
- Comprehensive: includes worst point and many types of behavior
- Standard definitions
- Useful suggested prompts
Tips for asking about suicide

**Gentle persistence:**

- “No, not really” usually means some form of suicidal thinking is present.
- Some individuals think that we are not interested in hearing about their suicide ideation unless they are seriously thinking about taking action.
- “What kind of thoughts have you had, even if they were just fleeting or you wouldn’t act on them?”

**Normalizing helps people feel comfortable:**

- “When people are feeling upset or stressed, they sometimes have thoughts that they wish they were dead. Have you ever had thoughts like this?”

**Gentle assumptions help individuals feel comfortable telling you about suicidal thoughts:**

- “What other ways have you thought about killing yourself?”

Adapted from Shea (1999), *The Practical Art of Suicide Risk Assessment*
PART 3

Suicide risk management
Clinical data

Risk Formulation
(Pisani, Murrie, & Silverman, 2016)

Risk Status
Relative to others in a stated population

Available Resources
Internal and social strengths to support safety and treatment planning

Foreseeable Changes
Changes that could quickly increase risk state

Risk State
Relative to self at baseline or selected time period

Strengths and Protective Factors
Long-term risk factors
Impulsivity/Self-Control (incl. subst. abuse)
Past suicidal behavior

Recent/present suicide ideation, behavior
Stressors/Precipitants
Symptoms, suffering, and recent changes
Engagement and Alliance

Risk Management Actions

Imminent suicide risk?

Yes

Do not leave the patient alone.
Arrange for hospitalization.
Engage family in planning.

No (but active suicide ideation)

Conduct Safety Planning Intervention
Involve support network.
Limit access to means.
Increase contact and make commitment through the crisis.
Arrange for MH evaluation; assure follow through.
Safety Planning

• Brief clinical intervention that results in a prioritized written list of warning signs, coping strategies, and resources to use during a suicidal crisis.

• Safety Planning plus caring contacts (Stanley et al., 2018):
  • 45% fewer suicidal behaviors, approximately halving the odds of suicidal behavior over 6 months (odds ratio, 0.56; 95% CI, 0.33–0.95, \( P = .03 \))
  • More than double the odds of attending at least 1 outpatient mental health visit (odds ratio, 2.06; 95% CI, 1.57–2.71; \( P < .001 \)).

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### A Personal Safety Plan

**RED FLAGS**

I KNOW SOMETHING’S WRONG WHEN I FEEL THIS WAY

•

•

•

WHEN I DO THESE, I FEEL BETTER

PERSONAL COPING STRATEGIES TO TAKE MY MIND OFF THINGS

•

•

•

PLACES TO GO, PEOPLE TO SEE

PEOPLE & PLACES THAT PROVIDE DISTRACTION

NAME

PLACE

NAME

PLACE

MY GO-TO FOLKS

MY CONFIDANTS & INNER CIRCLE

NAME

PHONE

NAME

PHONE

NAME

PHONE

TIME TO CALL THE PROS

CLINICIAN NAME

EMERGENCY PHONE #

CLINICIAN NAME

EMERGENCY PHONE #

LOCAL EMERGENCY SERVICE

EMERGENCY SERVICES PHONE

EMERGENCY SERVICES ADDRESS

THINGS I NEED TO DO TO BE SAFE

STEPS TO MAKE MY ENVIRONMENT OKAY

•

•

•

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**SAFETY PLANNING**

**COPING:**

- Focus on breathing, play with dog, pray

**PEOPLE/PLACES:**

- Go to coffee shop, call friend (Bill 777-7777)
- Text daughter Melissa

**SAFETY:**

- Bill will keep my rifles until I feel better

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**FOR EMERGENCIES:**

Call wife Linda (888-8888)
Call Dr. Price (999-999-9999)

**FRIENDSHIP LINE:** 800.971.0016

**SUICIDE PREVENTION HOTLINE:**

800.272.TALK (8255) Press “1” for Veterans

YOUR VA HOSPITAL EMERGENCY DEPARTMENT:

MEDVAMC - 2002 Holcombe

911
COLLABORATIVE SAFETY PLANNING FOR OLDER ADULTS

INTRODUCE PURPOSE

ESTABLISH COLLABORATION

WARNING SIGNS

STEP 1

STEP 2 COPING STRATEGIES

STEP 3 PEOPLE/PLACES TO DISTRACT

STEP 4 PEOPLE TO HELP

STEP 5 PROFESSIONALS/CRISIS CARE

STEP 6 MAKE ENVIRONMENT SAFE

COMMITMENT TO USE PLAN

Safety plans can address personalized risk factors

Table 1. Coping skills to target risk factors for late-life suicide during a crisis.

<table>
<thead>
<tr>
<th>Depression symptoms</th>
<th>Disability &amp; Dependence</th>
<th>Disease</th>
<th>Disconnectedness</th>
<th>Deadly Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhedonia more common than sadness: pleasant activities, exercise, helping others, prayer/religious readings</td>
<td>Talk back to thoughts about being a burden (these thoughts are associated with suicidal behavior)</td>
<td>Take medications as prescribed; attend to physical illness to increase mastery; list primary care doctor’s number</td>
<td>Loneliness: reach out to friends/family, call support hotline, attend social groups, online support groups, plan for future social activities, write letters, help others, volunteer</td>
<td>Firearm safety: store unloaded firearms in a locked cabinet, separately from ammunition; use a gun lock</td>
</tr>
<tr>
<td>Irritability: exercise, soothe with 5 senses (music, tea, pets), relaxation exercises</td>
<td>Help/support others (in a way that is safe) to counter burden thoughts</td>
<td>Refocus attention on reasons for living and meaning.</td>
<td>Grief: journaling, looking at photographs, writing a letter to loved one; containment exercises if grief is too intense</td>
<td>Enlist family in helping with safe storage of medications</td>
</tr>
<tr>
<td>Apathy: enlist family to schedule &amp; start pleasant events</td>
<td>Practice meditation &amp; acceptance exercises to tolerate distress</td>
<td>Coping skills for stressors involving lack of control: Relaxation &amp; other pain management strategies</td>
<td>List resources for transportation assistance on plan</td>
<td>Planned check-ins with family, neighbors, providers</td>
</tr>
<tr>
<td>Insomnia: Sleep hygiene</td>
<td>Activities that promote feelings of dignity</td>
<td>List helpful thoughts to cope with hopelessness about illness (especially new diagnoses)</td>
<td>Go to common areas (if in senior housing), listen to the radio or music, distract with mentally engaging activities (e.g., puzzles)</td>
<td>Remove alcohol from home during crises</td>
</tr>
</tbody>
</table>
• Routine screening for depression
  • PHQ-9, GDS, CES-D, PROMIS
  • Screening for suicidal ideation and intent

• Diagnose and treat depression to remission
  • Depression treatment is effective, including at reducing suicidal ideation and *maybe* suicidal behavior
  • Antidepressants, lithium, ketamine/esketamine
  • Psychotherapy for suicidal behavior—including Problem Solving Therapy

• Collaborative care
  • Meta-analysis indicating a small, but reliable effect of collaborative care for reducing suicide ideation, especially when embedded psychotherapy is part of the CCM (Grigoroglou et al., 2021)

• Suicide-specific interventions:
  • Safety Planning
  • Caring Contacts
  • Address social determinants of health
  • Means safety
  • 1-800-273-TALK
Why do people take their lives?

_Suicide attempts are rarely “out of the blue.” Attempters typically face multiple problems—some long term, some short term._

_The moment when they take action, however, is often during a brief period of heightened vulnerability._

_One of the most powerful risk factors for suicide deaths is the ready availability of highly lethal methods._

_In the U.S., that means guns._

https://www.hsph.harvard.edu/means-matter/lethal-means-counseling/
## Resources


Collaborative Care information and training: https://aims.uw.edu/collaborative-care


National Suicide Prevention Lifeline: https://suicidepreventionlifeline.org/


Stay connected.

Kim Van Orden, PhD
kimberly_vanorden@urmc.rochester.edu

The HOPE Lab @ URMC:
https://www.urmc.rochester.edu/labs/van Orden

@kimvanorden

@UR_hopelab