THE EVALUATION AND MANAGEMENT OF SUICIDE RISK

Dr. Gordon Mowat.
Clinical Lecturer, University of Alberta.
Psychiatrist, Edmonton Mental Health Clinic.
Consultant psychiatrist to the Beaufort Delta Health and Social Services, Inuvik, NWT.

Disclosure

• None.

Learning Objectives

• At the end of this presentation, you will be able to:
  • identify risk factors associated with suicide
  • recognise associated protective factors
  • perform a suicide risk assessment
  • use effective interventions in the management of a suicidal patient

Suicide rates in Canada in 2009

• Both, all ages 11.5 (3,890)
• Men all ages 17.9 (2,989)
• Women all ages 5.3 (901)

• Per 100,000 population.

Suicide rates 1950-2009 (WHO)

<table>
<thead>
<tr>
<th>Year</th>
<th>Both</th>
<th>Men</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>7.7</td>
<td>11.7</td>
<td>3.5</td>
</tr>
<tr>
<td>1960</td>
<td>7.6</td>
<td>12.0</td>
<td>3.0</td>
</tr>
<tr>
<td>1970</td>
<td>11.3</td>
<td>16.2</td>
<td>6.4</td>
</tr>
<tr>
<td>1980</td>
<td>14.0</td>
<td>21.3</td>
<td>6.8</td>
</tr>
<tr>
<td>1990</td>
<td>12.7</td>
<td>20.6</td>
<td>5.2</td>
</tr>
<tr>
<td>2000</td>
<td>11.7</td>
<td>18.4</td>
<td>5.2</td>
</tr>
<tr>
<td>2009</td>
<td>11.5</td>
<td>17.9</td>
<td>5.3</td>
</tr>
</tbody>
</table>
Suicide rates in Canada in 2009

- Girls 10-14: 1.2
- Girls 15-19: 5.2
- Boys 10-14: 1.3
- Boys 15-19: 12.6
- Women 50-54: 8.7
- Men 50-54: 28.4
- Women 85-89: 3.7
- Men 85-89: 30.6

According to the American Psychiatric Association, "the goal of the suicide risk assessment is to identify factors that may increase or decrease a patient’s level of suicide risk, to estimate an overall level of risk, and to develop a care plan that addresses their safety and modifiable contributors to suicide risk". (APA, 2006).

Risk factors

- Demographic features
- Psychiatric diagnosis
- Family history
- Childhood trauma
- Psychosocial features
- Suicidal thoughts and behaviours
- Psychological features
- Physical illness
- Cognitive features

Demographic features

- Male
- Widowed, divorced or single
- Adolescent or young adult age group, or > 45
- White or Aboriginal
- Gay, lesbian or bisexual orientation

Aboriginal suicide

- Rates vary across First Nations communities
- Royal Commission (1995) found rates 3 times higher than general Canadian population.
- Leading cause of death in youth and adults under 45.*
- Aboriginal youth between 15 and 30 have rate 5-6 times higher than non-aboriginal youth.*
- Northern Baffin, young males rate >200 / 100,000

Psychiatric diagnosis

- Most important cause of suicide
- Psychological autopsy studies show DSM diagnosis in 90% of suicides (Statistics Canada, 2002)
- Mood disorders (depression, dysthymia and bipolar disorder) in >60%

* Health Canada, 2003
### Psychiatric diagnosis

- Major depressive disorder 10-15%
- Bipolar disorder (primarily in recent onset depression or mixed episode) 5%
- Schizophrenia 10%
- Alcohol dependence (up to 15%) and drug use disorders (heroin dependence 20 times general rate)
- PTSD
- Cluster B personality disorders, particularly borderline and antisocial (5%)

### Family history

- Of completed suicide
- Of mental illness, including substance use disorders

### Childhood trauma

- Physical abuse, including bullying
- Sexual abuse

### Psychosocial features

- Recent or anticipated loss (relationship, job)
- Lack of social support (including living alone)
- Unemployment
- Drop in socio-economic status
- Poor relationship with family
- Domestic violence
- Recent stressful life event (including criminal charges)

### Suicidal thoughts and behaviours

- A previous suicide attempt
- The factor most predictive of future suicidal behaviour
- Risk increases by 37 times (Harris & Barraclough)
- Current suicidal thoughts or plan
- Previous suicidal thoughts or plan

### Psychological features

- Hopelessness
- Severe or unremitting anxiety
- Panic attacks
- Shame or humiliation
Psychological features

• Severe anhedonia
• Decreased self-esteem
• Impulsiveness
• Aggression
• Agitation.

Physical illness

• Thought to be contributing factor in 50%
• Any illness leading to dependence or reduced function
• Pain syndromes
• Nervous system disease (e.g., stroke, multiple sclerosis or Huntington’s disease, brain and spinal cord injury, seizure disorders)
• Cancer, including its treatment
• HIV/AIDS
• Medication can cause depression (steroids, interferon)
  FDA warnings for antidepressants, Champix, Tramadol, anticonvulsants

Cognitive features

• Loss of executive function (reduced ability to control and apply one’s own mental skills)
• Thought constriction (inability to see the big picture)

Protective factors

• Positive social support
• Life satisfaction
• Sense of responsibility to the family
• Children in the home (except for those with postpartum psychosis or mood disorder)
• Pregnancy, if wanted
• Religiosity

Protective factors

• Restricted access to lethal means
• Adequate reality testing, insight into illness
• Positive problem-solving skills
• Access to help
• A positive therapeutic relationship
• Good coping skills

Source of information

• Direct observation and questioning of the person
• Clinical file
• Other members of the multidisciplinary team
• Significant others
• Others outside the clinical team such as outpatient therapist or community worker
Assessment

- Complete psychiatric history.
- Mental state exam.
- Rating scales can be helpful.

Psychiatric history.

- This will reveal all the risk and protective factors, and current psychosocial situation.

Mental state exam.

- This will lead to a psychiatric diagnosis.
- Check for evidence of those psychiatric signs and symptoms associated with increased risk:
  - Aggression, and violence towards others
  - Impulsiveness
  - Hopelessness
  - Anxiety and panic attacks
  - Anhedonia

Rating scales

- SAD PERSONS scale
- Beck Hopelessness scale
- Beck Scale for Suicide Ideation
- Columbia Suicide Severity rating scale
- Geriatric Suicide Ideation Scale
- Nurses’ Global Assessment of Suicide Risk

SAD PERSONS scale

| S | Sex: 1 if male |
| A | Age: 1 if < 20 or > 44 |
| D | Depression: 1 if present |
| P | Previous attempt: 1 if present |
| E | Ethanol abuse: 1 if present |
| R | Rational thinking loss: 1 if present |
| S | Social supports lacking: 1 if present |
| O | Organized plan: 1 if plan is made and lethal |
| N | No spouse: 1 if divorced, widowed, separated, or single |
| S | Sickness: 1 if chronic, debilitating, and severe |

Proposed clinical action:

- 0 to 2 Send home with follow-up
- 3 to 4 Close follow-up; consider hospitalization
- 5 to 6 Strongly consider hospitalization, depending on confidence in the follow-up arrangement
- 7 to 10 Hospitalize or commit

Beck Hopelessness scale

- 20 questions, true/false cover three aspects of hopelessness
  - Negative feelings about the future
  - Loss of motivation
  - Pessimistic expectations
Beck Scale for Suicide Ideation

- Measures the current and immediate intensity of suicidal thoughts, behaviours and plans
- 21 item questionnaire, rated on a three point scale

Assessment style

- A calm and empathetic approach, non-judgmental and unhurried if at all possible should lead to a therapeutic alliance, allowing the person to trust and share. A rushed and impatient physician won’t learn much.
- You may be the first to be told about the person’s thoughts of death and suicide; this can bring them great relief.

Ask about suicidal thoughts

- Use a calm matter of fact approach.
- General questions like:
  - “How are things going for you these days?”
- More specific:
  - “Do you often think it would be good to go to sleep at night and never wake up again?”
  - “Do you think about death much these days?”
  - “Have you had thoughts recently about doing something to end your life?”

Follow up questions

- “How long have you had thoughts like this?”
- “Are they with you much of the time?”
- “Do they bother you?”
- “Can you ignore them, or get rid of them?”
- “Have you been close to acting on them?”
- “Have you thought what you might do?”

Ask about the plan

- “Have you a plan?”
- “What have you thought of doing?”
- Ask for details of method. Do they have the means?
- Do they think it will be lethal.
- Would someone find them or not?
- Ask about access to guns, hunting rifles and ammunition, or to large quantities of pills.

In psychotic individuals

- Ask about auditory hallucinations, what they say, how loud or intrusive they are.
- “Do they tell you to harm yourself or end your life?”
- “Are you able to resist them?”
- “Have you been close to acting on what they say?”
<table>
<thead>
<tr>
<th>Past attempt</th>
<th>Assess current psychosocial stresses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess the seriousness</td>
<td>• Actual or perceived loss of relationship</td>
</tr>
<tr>
<td>• Timing: was anyone around?</td>
<td>• Financial difficulties or drop in socio-economic status</td>
</tr>
<tr>
<td>• Method: what did you do?</td>
<td>• Family discord</td>
</tr>
<tr>
<td>• Intent: what did you want to happen?</td>
<td>• Domestic violence</td>
</tr>
<tr>
<td>• Circumstances: what was going on in your life at the time?</td>
<td>• Employment status, living situation, presence or absence of supports</td>
</tr>
<tr>
<td>• Use of alcohol: were you sober at the time?</td>
<td>• Consequences: what happened? Did you get help?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High risk without attempt</th>
<th>High risk after attempt (or failed one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Actively suicidal with specific lethal plan</td>
<td>• Psychotic</td>
</tr>
<tr>
<td>• Psychotic</td>
<td>• Major mental illness, especially recent onset</td>
</tr>
<tr>
<td>• Major mental illness, especially recent onset</td>
<td>• Attempt was planned, near lethal, violent</td>
</tr>
<tr>
<td>• Unstable living situation</td>
<td>• Efforts made to avoid discovery</td>
</tr>
<tr>
<td>• Limited family or social support</td>
<td>• Intent still present</td>
</tr>
<tr>
<td></td>
<td>• Regrets surviving</td>
</tr>
<tr>
<td></td>
<td>• Currently impulsive or agitated</td>
</tr>
<tr>
<td></td>
<td>• Unstable living situation</td>
</tr>
<tr>
<td></td>
<td>• Limited family or social support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moderate risk, attempt or not</th>
<th>Lesser risk, attempt or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Psychotic</td>
<td>• Attempt or intent has low lethality</td>
</tr>
<tr>
<td>• Major mental illness</td>
<td>• Obvious precipitating events</td>
</tr>
<tr>
<td>• Previous attempt</td>
<td>• View of situation changed since arrival in ER</td>
</tr>
<tr>
<td>• Outpatient treatment with poor response</td>
<td>• Cooperative to treatment and follow up plans</td>
</tr>
<tr>
<td>• Lack of timely outpatient treatment</td>
<td>• Stable living situation</td>
</tr>
<tr>
<td>• Need for supervised investigation or treatment</td>
<td>• Good family and social supports</td>
</tr>
<tr>
<td>• Unstable living situation</td>
<td>• Limited family and social support</td>
</tr>
<tr>
<td>• Limited family and social support</td>
<td>• Consequences: what happened? Did you get help?</td>
</tr>
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### Inpatient treatment

- Provide a safe environment:
  - furniture that is not easily moved
  - no curtains
  - no rods or fixtures that could be used to hang from
  - no electrical cords

- Mental Health Act
  - Search belongings for potentially dangerous items like pills, lighters or matches, knives, razor blades or other things considered to be a weapon.
  - Dress in pajamas, gown
  - Remove belts, etc.
  - Provide safe levels of observation.

### Treatment interventions: medication

Treat the underlying problem

- Major depression with SSRI etc.
- Mixed mood state with mood stabiliser
- Schizophrenia with antipsychotics

- Insomnia with hypnotics
- Agitation and anxiety with benzodiazepines or atypical antipsychotics

### Beware!

- As depression lifts, patients can become stimulated and energised, increasing their suicide risk.
- SSRI antidepressants can worsen suicidality (appears age related; under 25, risk double).
- 1% of suicides occur in hospital.

### Treatment interventions

- Help find alternative methods of coping with intense feelings.
- Encourage to talk about their experiences rather than acting on them.
- Help reflect on events, thoughts and feelings that immediately precede suicidal thoughts to help them understand triggers.
- Develop a written plan to prepare to manage intense feelings that lead to suicidal thinking.
- Ensure the clinical team is consistent in their approach.
Treatment interventions

- Reassess risk frequently and regularly

Documentation

- Communicates patient health information (i.e., suicide risk information) to other healthcare providers
- Facilitates evaluation of the patient's progress
- Demonstrate clinician's accountability for care provided

Write notes

- at the first psychiatric assessment
- whenever there is a change in the patient's clinical state
- with any incident of suicidal behaviour
- before increasing privileges
- before discharge

Special situations

- Suicide pact
- Murder-suicide
- “Suicide by cop”
- Suicide bomb attacks

CAMH Suicide Prevention and Assessment Handbook

- Thorough coverage of the subject from a contemporary Canadian point of view.
- Includes management of aftermath of completed suicide.

Suicide Risk Assessment Guide

- Prepared by the Ontario Hospital Association in 2011.
- 94 pages.
Centre for Suicide Prevention
- http://suicideinfo.ca
- Based in Calgary.
- Library, online resources.
- Offers suicide prevention training programmes.

Night Falls Fast, by Kay Redfield Jamison

Beck Hopelessness Scale
- 1. I look forward to the future with hope and enthusiasm.
- 2. I might as well give up because there is nothing I can do about making things better for myself.
- 3. When things are going badly, I am helped by knowing that they cannot stay that way forever.
- 4. I cannot imagine what my life will be like in ten years.
- 5. I have enough time to accomplish the things I want to do.
- 6. I expect to succeed in what concerns me most.
- 7. My future seems dark to me.

Beck Hopelessness Scale 2
- 8. I happen to be particularly lucky, and I expect to get more of the good things in life than the average person.
- 9. I just cannot get the breaks, and there is no reason I will in the future.
- 10. My past experiences have prepared me well for the future.
- 11. I can expect that my future is totally unhappy.
- 12. I don’t expect to get what I really want.
- 13. When I look ahead to the future, I expect that I will be happier than I am now.

Beck Hopelessness Scale 3
- 14. Things just don’t work out the way I want them to.
- 15. I have great faith in the future.
- 16. I never get what I want, so it’s foolish to want anything.
- 17. It’s very unlikely that I will get any real satisfaction in the future.
- 18. The future seems vague and uncertain to me.
- 19. I can look forward to more good times than bad times.
- 20. There is no use in really trying to get anything I want because I probably won’t get it.

Beck Suicide Ideation Scale
1. Isolation:
   - Somebody present
   - Somebody nearby or in visual or vocal contact
   - No one nearby or in visual or vocal contact
2. Timing:
   - Intervention probable
   - Intervention unlikely
   - Intervention highly unlikely
3. Precautions against discovery:
   - No precautions
   - Passive precautions
   - Active precautions (locked door)
4. Acting to get help:
   - Notified potential helper
   - Contacted but did not specifically notify potential helper
   - No contact
5. Final acts in preparation of death, (will, gifts etc.):
   - None
   - Thought about, or made some arrangements
   - Definite plans or arrangements
Beck Suicide Ideation Scale 2

6. Active preparation for attempt:
   - None
   - Minimal to moderate
   - Extensive

7. Suicide note:
   - None
   - Written or torn up, or thought about
   - Present

8. Overt communication before attempt:
   - None
   - Equivocal
   - Unequivocal

9. Alleged purpose or intent:
   - To manipulate environment, get attention or revenge
   - To escape, solve problems, die

10. Expectations of fatality:
    - Thought death unlikely
    - Thought death possible, not probable
    - Thought death probable or certain

11. Conception of lethality:
    - Not lethal
    - Possibly lethal
    - Definitely lethal

12. Seriousness of attempt:
    - Not serious attempt to end life
    - Unserious attempt
    - Serious attempt to end life

13. Attitude towards dying:
    - Did not want to die
    - Components of 0 and 2
    - Wanted to die

14. Conception of medical rescuability:
    - Death unlikely with medical help
    - Certain of death even with medical help

15. Degree of premeditation:
    - None, likely impulsive
    - Contemplated for three hours or less
    - Contemplated for more than three hours

Beck Suicide Ideation Scale 3

11. Conception of lethality:
    - Not lethal
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COLUMBIA-SUICIDE SEVERITY RATING SCALE

In the past month:

- 1. Wish to be dead:
  - Person 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?

- 2. Suicidal thoughts:
  - General non-specific thoughts of wanting to end one’s life or commit suicide. “I’ve thought about killing myself” without general thoughts of ways to kill self.
  - Have you actually had any thoughts of killing yourself?

- 3. Suicidal thoughts with method, without specific plan or intent:
  - Person endorses thoughts of suicide and has thought of at least one method. This is different than a specific plan with time, place or method details worked out. “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 kill yourself?

4. Suicidal Intent without specific plan:
   - Active suicidal thoughts of killing self and patient 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?

5) Suicide Intent with specific plan:
   - Thoughts of killing self with details of plan fully or partially worked out and person has some intent to carry 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?

6) Active suicidal behaviour:
   - “Have you ever done anything, started to do anything, or prepared to do anything to end your life?”
   - Examples: Collected pills, obtained a gun, given away valuables, written a will or suicide note, taken out pills without swallowing any, held a gun but changed mind or actually took pills, tried to shoot self, tried to hang self, etc.

   If YES, ask: How long ago did you do any of these?