Suicide

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The Rural Emergency Continuum of Care Conference

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Introduction

- Who am I
- What to expect
- Disclaimer
- Tech points
Thoughtful introductory quote

“Suicide is painless”
- theme from M*A*S*H (1970)

Definition of emergency
- department
Objectives

1) Be familiar with the “red flags” of the potentially suicidal patient.

2) Have a clear idea how to manage patients who are not an immediate risk.

3) Be able to initiate management of the potentially suicidal patient.

4) Be comfortable with indications for and methods of involuntary restraint of such patients.

5) Have some knowledge of current medico-legal issues surrounding the potentially suicidal patient in the ED.
Case # 1

- The man with cancer
  - Lived alone
  - Recent dx lung ca
  - Owned a gun
  - Shot heard on his front porch
Case # 2

- The young lady with green hair
  - Lived on street
  - Some drug use
  - No clear suicidal ideation. But...
The PD who enjoyed antifreeze

- 35 YO male w/BPD
- Drank ethylene glycol, phoned EHS
- A lot
- Intervention
Case # 4

- The young woman and the ex-boyfriend
  - 17 YOF broke up with BF
  - Took 3 APAP, 1 Ativan, and some Flintstones vitamins
  - Called BF, who called EHS
  - Much weeping, running, handwringing
Case #5

- The young lady who had everything
  - 28 YOF resident
  - Intelligent, talented, attractive
  - Admitted to downtown hospital for suicidal ideation
Case #6

- The guy who really, really wanted to die
- 41 YO male
- Recent cocaine binge
- Doused self in gas, lit up, drove van into wall, wall collapsed, went over cliff. EHS arrived, watched as screwdriver plunged into LUQ, then drilled into left parasternal area. To hospital.
**Definitions**

- **suicide** |ˈsoʊiˌsɪd| noun
  - the action of killing oneself intentionally
- **Suicidal ideation**: thoughts
- **Passive SI**: “I wish I were dead”
- **Active SI**: “I’m going to buy a gun and shoot myself”
- **Suicidal gesture**: No realistic expectation of death
- **Suicide attempt**: Self-inflicted harm expecting death
Epidemiology

“Suicide is among the top three causes of death in the 15-44 years of age group around the globe.” (WHO)

One million deaths per year worldwide
Still more epidemiology

- One in three may contemplate suicide
- One out of 18 attempts is completed
- About 1/10,000 people commit suicide
So you think you know about suicide?

- What country has the highest suicide rate?
- Lithuania. (WHO, Wikipedia)
- Or maybe Hungary.
Suicide and suicidal behavior.
Nock MK - Epidemiol Rev - 01-JAN-2008; 30: 133-54
Who attempts suicide?

Epidemiology - Canada

Male and Female suicide attempts by age group.
Epidemiology - Canada

- Deaths by suicide in Canada (2003): 3,764
- Male deaths by suicide: 2902
- Female deaths by suicide: 862

From Stats Canada 2003
So you think you know about suicide?

- Is suicide illegal in Canada?
- Who cares? But no. It was removed from the criminal code in 1972.
American suicide methods

- US: Suicide 2x more likely than homicide
- 8th-11th leading cause of death in US
- GSW most common method in US
- Rate 57x higher in 1st wk post handgun purchase
- Guns: male, EtOH, prior arrest, PD
- Jump: single, unemployed, psychotic
- More likely to jump where tall buildings and bridges
So you think you know about suicide?

- What province has the highest suicide rate?
  - Quebec (StatsCan, 2001)
Suicide Death by Province (NB: Nunavut x 10)

Source: Stats Can 2003
Big two (90% have at least one of):

- Schizophrenia/major depression
- Addictive disorder

15% suicide death rate with at least one
Pathophysiology

Many motivations:

- hopeless, guilt, self-hatred
- psychosis
- escape from chronic pain
- copycat - adolescents
Pathophysiology

- Aggression to others, then self
- May arise from loneliness as child, sexual abuse
- Genes: Attempts vs success
- Low serotonin, low dopamine
Depression

- Major risk factor for suicide.
- 15% will complete.
- Need practical tool for ED.
- Sig me caps (Sleep, Interest, Guilt, Mood, Energy, Concentration, Appetite, Suicidal) *
- At least five, and at least one of first two, all present in a two week period = major depressive episode
  
* Harwitz, 2000
Schizophrenia

- Major risk factor
  - 4-10% (8x baseline) of pts w/SCZ commit suicide
  - 20-40% will attempt suicide
  - Risk in SCZ: young, male, white, high functioning pre-scz, single, substance abuse, prior attempts, recent D/C
Mania

- Multiple variants of bipolar disease
- Increased risk in depressive episodes vs manic
- Male=female risk
So you think you know about suicide?

- True or false? Borderline PDs don’t ever really kill themselves.
- False - BPDs have a significantly higher successful suicide rate (3-10%)
Personality disorders

- BPD is clearly a risk for “attempts”
- BPD also has 3-10% risk of successful suicide
- Other risks: PTSD, ASPD, schizotypal, incr freq/sev of attempts
- ASPD has 3.7 x greater likelihood of suicide
Panic Disorder

- Conflicting evidence - may be at increased risk
Evaluating

- Place
  - quiet, safe
  - for both
  - the harmless little girl

- Approach
  - look for nonverbal and verbal clues
Evaluating

- Nonverbal clues
  - age (>60)
  - gender (male)
  - race (white, native)
Evaluating

- History
  - Medical history (chronic disease: ca, HIV, CRF, PUD, SLE, chronic pain)
  - Current medications (ie opiates)
  - Psych hx (prior attempts, psychosis)
  - Social (marital, living arrangements)
Evaluating

- How do you ask?
- Not the VGH way.
“I notice you seem sad today.”

Ask *the* question

- Be direct, sensitive, non-judgemental
- Does NOT give them ideas
- “Have you thought about harming yourself?”
Evaluating

- Is there a plan?
- How serious/lethal is it?
  - Inquire re weapons, hoarding pills.
- Is it rehearsed/researched?
- Is there a note?
- All of these increase risk
How to Kill Yourself Using the Inhalation of Carbon Monoxide Gas

by Jerry Hunt

NOTE: This is a transcript of a how-to videotape Jerry made shortly before his death. It was intended to offer practical information to rational adults suffering from terminal or debilitating illnesses (and not from depression or emotional distress). There have been some minor edits for readability, but this is otherwise a verbatim record of Jerry's words. For background on Jerry's death, read UnlikelyPersona: Jerry Hunt (1943-1993).

This file is provided only for informational purposes. The Webmaster and other individuals affiliated with Jerry's estate and archives do not necessarily endorse the views Jerry expresses herein, and will not accept responsibility whatsoever for anyone who acts on this information, nor will they provide any assistance in response to inquiries. If you find this subject matter offensive, please close this page now. By proceeding, you agree not to bring complaints or objections to any person, company or organization affiliated with this Web site or its Internet host.

Italicized lines below describe the action in the videotape.

In the tape, Jerry is seated next to a brown gas cylinder.

The reason I'm making this tape is because the difficulty that I've experienced in coming to some decision about this was so great that I decided that it might be useful to other people to have some information about decisions that I've made. So that's why I've decided to do it. I think, also, if you should choose a method of this kind, a lot of the peripheral questions that you think are not important will answer themselves.

For about ten years, in just looking at the general question of going about killing yourself, it's occurred to me just by looking at the information that I've seen, that clearly of all the methods that are possible, carbon monoxide is definitely the most successful. Even in industrial accidents, and in times in which there's no intention involved, the success rate is very, very high from the standpoint of death. But there are some dangers and there are difficulties. I also think that difficulties that the use of carbon monoxide gas produces for an individual are sufficient that it tends to screen away emotional and other kinds of responses which don't make sense. In other words, this method is not easy to use if you don't have clear ideas about what your intentions are, and what you plan to do.

What I decided was to obtain industrially-pure (or at least 98% pure) carbon monoxide gas. Because of some of the attention that has been placed around carbon monoxide in the last year (this tape is being made in 1993) it's very clear that it's very effective. The choice of using a pure gas involves a very simple answer to a complex question. And that is: "How can I proceed successfully?" I want to point out a couple of things that I think are very important in doing this. Carbon monoxide gas is easily obtainable from any industrial gas supply company that carries a wide range of gases. If they carry argon, nitrogen and a few other of the industrial gases, most likely they will have carbon monoxide. But carbon monoxide is a unique gas. Monoxide, happily, is indistinguishable to the hemoglobin in the body from oxygen and carbon dioxide. So it aggressively combines. It's colorless. It's odorless. It's tasteless. It is indistinguishable to the body, in large quantities in particular, from oxygen use. And so as a consequence there are certain safeguards around the purchasing of the gas. So it's very important in purchasing the gas, I think, to do two things. One is to be very clear that you understand the dangers to the person who is supplying the gas, and then to do, as I have done for example, to write an authorized and witnessed statement completely exonerating all of the people (this means not just the manufacturer, but the supplier and all of his business associates) from any responsibility. One of the big difficulties I encountered when I purchased this gas in the state of Texas was the fear that, by accidental use of this gas, I might kill myself, and they might be held criminally liable.

So I won't talk about details like that, because I assume that if you have the intention to kill yourself, you've thought about a lot of those complex issues, and there's no point in discussing things like this in a tape for general use.

The cost of this gas was $102. This is at 1993 prices. It's a standard 2200 lbs. cylinder. It must be stored at temperatures below 125°F. Obviously it needs to be locked off. I've never locked the gas off, because there's no danger [here] of anyone coming in contact with it. But you do have to take some precautions. And remember, not only is the gas toxic to you, but it's toxic to every other living thing that depends upon oxygen to breathe. I actually leased the cylinder. I paid a deposit for the cylinder. I told them that I was using it for purposes that I understood, which in the case of the carbon monoxide gas, so there are a variety of applications in medicine and metallurgy. There are uses for it. It is a standard industrial gas. Not every gas supplier will have it, but it is standard.

At this point in the tape, Jerry unscrews a cap at the top of the cylinder to reveal the gas valve. He holds the plastic coupling (transparent plastic tubing) described previously.

What I wanted you to understand is how very simple it is. It's not necessary to buy complicated equipment, pressure regulators and the like. I just wanted to show you what I have done, and then also to bring your attention to some very serious questions, once you've made up your mind to do this. Notice that rather than using any kind of standard connector, all I do is remove the gas cap. I place a standard piece of hardware [store] obtainable plastic coupling which will fit over the lip. In fact this is standardized for all kinds of industrial gases, the connector is a standard connector. And this, I think, is a 1/2-inch plastic coupling. I just use a simple pinch-type connector, so that I can pinch...
How to ask stuff

- What are the secrets that psychiatrists use?
1) Fact finding: Draws out facts

- How close do you think you came to killing yourself? ("Not that close") vs:
- Exactly how many pills did you take?
How to ask stuff (Cont’d)

2) Sequencing:

- What happened tonight? vs:
- After you took the pills, what did you do next?
3) Normalization/Gentle assumption - patients may feel too embarrassed to describe a particular behaviour.

a) Normalization:

“Some people in this kind of situation have thought about killing themselves. Have you considered that?”
How to ask stuff (Cont’d)

- b) Gentle assumption:
  - Do you masturbate? vs:
  - How often do you masturbate?
4) Symptom amplification: sets the bar high, prevents minimizing:

- How many pills did you take? 40? 50?
- Do you masturbate 30 times per day? 40?
Get collateral!

- Most people can’t keep a secret
- Family, friends, police, paramedics, witnesses
Evaluating

- Physical exam
  - VS, fever, glucometer, O2 sat’n
  - Agitation, impulsiveness
  - Intoxication/orientation/delerium
  - Scars suggesting remote or recent SI injury
Evaluating

- Physical exam:
  - head injury
  - meningitis*, pneumonia, urosepsis
  - any correctable condition
  - evidence of chronic disease

* Another fascinating anecdote
Evaluating

- Labs
  - “Psych panel”
  - CBC, Chem w/LFTs, EtOH, ASA, APAP, TSH
  - Absolutely useless in known psych pts
  - Others: tox screen, CT head
Risk factors

- Rates increase with:
  - mental illness (depression, schizophrenia)
  - substance use/addiction (EtOH, cocaine)
  - age (>60)
  - gender (men)
Risk factors

- Rates increase with (cont’d):
  - financial difficulties
  - single/lack of social support
  - recent humiliation
  - fam hx suicide attempt/success
  - recent D/C from psych stay or prison
Occupational risks

dentists - 5.43x
physicians - 2.31
nurses -1.58
social workers -1.52
mathematicians and scientists -1.47
artists - 1.30
lawyers?

APA Guidelines, 2003
### How do we decide?

#### Relative risk factors

<table>
<thead>
<tr>
<th>Condition</th>
<th>Relative risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior suicide attempt</td>
<td>38.4</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>23.1</td>
</tr>
<tr>
<td>BAD</td>
<td>21.7</td>
</tr>
<tr>
<td>Major depression</td>
<td>20.4</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>12.1</td>
</tr>
<tr>
<td>OCD</td>
<td>11.5</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>10</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>8.45</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>7.08</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>5.86</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Adapted from A.P.A. Guidelines, part A, p. 16
So you think you know about suicide?

- True or false: Dementia increases suicide risk.
- False. Dementia is **not** a risk factor for suicide.
How do we decide?

- Protective factors:
  - Children at home
  - Pregnancy
  - Deterrent religious beliefs
  - Life satisfaction
  - Reality testing ability
How do we decide?

- Protective factors (cont’d)
  - Positive coping skills
  - Positive social support
  - Positive therapeutic relationship
How do we decide?

- Talk to the patient. Drugs or EtOH should be metabolized.
- Ask them directly
- Assess high and low risk factors
- Talk to family/friends
Decision time!

“Well, we’ll just use the suicide evaluation tool.”

Problem: there isn’t one

Correction: there are several

Problem: They don’t work. At least not well.*

How do we decide?

- The grail: ID short term suicide risk
- “No single psychological test can accurately predict suicidal attempts.” - Rosen
- Up to 44% missed - by psychiatrist
- 31 different scales
- Some scales useful for hospitalization, but not harm
- Problem: how do we safely send people home?
Suicide Scales

- Beck Hopelessness Scale
- Beck Depression Inventory
- Scale for Suicide Ideation—Worst Point
- Lifetime Parasuicidal Count
- SAD PERSON Scale
- Linehan Reasons for Living Scale
- Suicide Potential Lethality Scale, etc
Assessment of suicide potential by nonpsychiatrists using the SAD PERSONS score. -
How do we decide?

- Sex (male) 1
- Age (<19 or >45) 1
- Depression or hopelessness 2
- Previous attempt/psych hx 1
- Excessive EtOH or drug use 1
- Rational thinking loss 2
- Single 1
- Organized or serious attempt 2
- No social support 1
- Stated future intent 2

<6: OP
≥6: Psych assess
How do we decide?

- Ultimately, there is no perfect rule, and you have to guess.
- Add up risks with relative weights.
- In general, as with all such dilemmas, do what is right for the patient.
- When in doubt, refer/commit/restrain.
Who goes home?

- Few or no high risk factors
  - Low SADPERSONS (or other) score
  - Good home
  - Fam/friends/support
  - Phone contact
  - F/U
  - No gun
So you think you know about suicide?

- True or false? A “contract” with a suicidal patient in the ED protects the patient and the EP.
- False. No benefit found where there is no pre-existing therapeutic relationship. And zero medico-legal protection.
Management (Cont’d)

- Prevent further harm
  - Secure patient, secure room
  - Remove clothing, belts, etc
  - Search for weapons, drugs*, old syringes, BP cuffs, pens, tenaculum*
  - Observe / restrain

- Not family

* Yet more anecdotes
The “C” Word

Does commitment help?
- Maybe short term.
- Most people who really want to die...
So you think you know about suicide?

- I’m afraid that I can be sued for restraining someone who turns out not to be psychotic. What’s the truth?
- Anyone can be sued for anything, at any time, by anyone, and lose.
- CMPA
Management (Cont’d)

- Pharmacologic restraint when possible
  - Loxapine 10 mg IM, lorazepam 1-2 mg IM
- Physical restraint when necessary
What happens after the ED?

- In or outpatient
  - lithium and clozapine - some evidence of SR
  - ECT - short term reduction
  - Psychotherapy - may be effective (CBT)
  - SSRI/TCAs - ? evidence of suicide reduction
So you think you know about suicide?

- Don’t antidepressants increase the risk of suicide initially?
- In a review of observational studies, SSRIs increased the risk in adolescents, but decreased the risk of suicide in adults and elders.

Variation in the risk of suicide attempts and completed suicides by antidepressant agent in adults: a propensity score-adjusted analysis of 9 years' data. - Schneeweiss S - Arch Gen Psychiatry - 01-MAY-2010; 67(5): 497-506
Case #1

- The man with cancer
- GSW to head
- No warning, but left note
- Risk factors: older, white, single male, malignancy
- Learning point: multiple risk factors
Case #2

- The young lady with green hair
- Cleared by psych
- Three days later, trauma call
- Risk factors: homeless, substance use, no support, first attempt
- Learning point: some get missed
Case #3

- The PD who drank antifreeze
- An intervention took place
- Pt returned several mos later after a phone call
- Risk factors: PD, prior attempts, pot. lethal
- Learning point: maybe some interventions help
Case #4

- The young woman and the underdose
- Survived event, but nearly killed by staff
- Risk factors: young female
- Learning point: immaturity does not equal suicidality
Case #5

- The young woman who had everything
- Convinced staff OK to go out with friend
- Convinced friend OK to go home
- Risk factors: prior sexual abuse, long hx depression, well thought out plan
- Learning point: some people will kill themselves
Case #6

- The guy who really, really wanted to die
- Admitted to ICU/Burns
- Died during trach change
- Risk factors: many
- Learning point: ?
Take Home Points

- Beware the risk factors:
  - depression, schizophrenia, addiction, hopeless
  - single, white, older, male, isolated, plan

- Some PDs really will kill themselves

- When in doubt, keep and refer

- It is better to restrain and be wrong, than not restrain and be really wrong
Use fact finding, sequencing, normalization, gentle assumption and symptom amplification.

Be gentle, non-judgmental so patients trust you.

Don’t trust patients. Get collateral.

Despite good care, some people will kill themselves.

You will probably never meet an older, single, male, schizophrenic, depressed, alcoholic Lithuanian.
Additional resources

- Health care professionals: Working with the Suicidal Patient.
- Patients: “Coping with Suicidal Thoughts”
- [www.health.gov.bc.ca/mhd](http://www.health.gov.bc.ca/mhd)
Thanks Kelowna!

- Comments, suggestions, scathing criticisms
- campana@telus.net
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