

# Risk Assessment and Management in Suicidal Medical Patients

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## Take Home Messages

- We have no valid way of predicting who will commit suicide
- The only two risk factors consistently shown are depressed mood and past attempts
- We do a risk assessment on most patients, and categorize them as low, medium or high risk, but this process is widely questioned and probably not valid.
- Risk assessment screening tools are relatively new, poorly studied, not yet established as useful, and possibly drain resources from established useful programs
- Predicting human behaviour is very difficult, and not one of our strong points.



## Working with risk

- No one can predict the future!!
- Some areas of medicine are less predictable than others.
- Predicting suicide risk is particularly stressful.
- Even if you get the risk assessment right, the patient may still commit suicide



## Recent Vic Health Dept Review (2010)

- 40+% of people who commit or attempt suicide had contact with a health professional in the preceding month
- There are few well validated screening measures
- Even the best ones have specificity below 40%, hence require lots of management of false positives, therefore needs to be done in parallel with psychiatric assessment to better establish needs



## Psychiatric Risk Assessment

- Done in the context of an assessment
- A brief assessment can still include a risk assessment if attention is paid to the key elements
- Corroborative history especially useful
- Documentation of the risk assessment to justify the management is essential



## Risk Assessment: Four Key Elements

- Patients current statement & attempt
- Past History
- Presence of a psych disorder
- Risk Factors



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#### **Current Statement**

- Engage patient in escalating questions
  - "Do you fell that life is not worth living"
  - "Would you rather be dead"
  - "Do you think about killing yourself" (suicidal ideation)
  - "Do you plan on killing yourself.... How?" (suicide plans)
- How lethal was the attempt?
- Was the person determined not to be stopped?



## **Current Statement**

No suicidal ideas

Suicidal ideas, no plans, no intention

Plans, but vague/unrealistic, unclear intention

Realistic plans & Intention to complete



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## **Past History**

- The best predictor of future behaviour is past behaviour
- Serious suicide attempts in similar circumstances in the past versus multiple minor attempts in various circumstances
- First ever attempt is always significant



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## Presence of psychiatric disorder

- Most psychiatric disorders carry an increase risk of suicide.
- A psych systems review includes depression, mania, psychosis, drugs & alcohol, anxiety, eating, and memory.
- It is particularly important to screen for depression, psychosis, and <u>delirium</u>



# Risk Assessment: Four Key Elements

- Patients current statement & attempt
- Past History
- Presence of a psych disorder
- Risk Factors



#### **Risk Factors**

- Suicide is a rare event, even amongst psychiatric patients, and risk factors alone will identify many more patients potentially at risk than imminently in danger of dying
- Suicide rate is 12-15 per 100,000 per year, about 8<sup>th</sup> commonest cause of death, about 2000 deaths per year.



#### Risk Factors

- Risk factors provide a context in which to consider the individual patient and their history, and so formulate a risk for this patient on this day.
- Risk factors are based on epidemiological surveys of completed suicide (mostly) so give an indication of long term risk rather than acute risk



#### Risk Factors

- Medical Risk Factors:
  - Chronic or terminal illness, especially cancer, chronic renal failure,
    AIDS.
  - Painful or disfiguring illness
  - 25% of suicides have a physical illness at post mortem
- Family History Suicide 8 times more likely in 1<sup>st</sup> degree relatives of psych patients than controls



#### Risk Factors cont.

- Psychosocial
  - Social isolation
  - Unemployment
  - Div/separated/widowed>single>married
  - Low/high > middle social class
- Demographic
  - Male:female = 3:1
  - Increases with age?
    - > Males risk also high in late adolescence
    - > There is no real low risk age!!



#### Suicide Rates

- WHO reported suicide rates in Australia
  - 10.4% of the population seriously consider suicide in their lifetime
  - 4.2% attempt suicide
  - 21 suicide deaths per 100 000 males (increased in age 15-24 and >75)
  - 5.5 suicide deaths per 100 000 females (but more highly represented in attempts)



## Challenge of Predicting Rare Outcome

#### Hypothetical

- Asking a question about suicide which has a sensitivity 80% to identify a high risk individual, and specificity of 70%
- In a population of 10 000, 10 of whom will commit suicide.
- Results 8 true positives, 2 false negatives but will show 2997 false positive results. And have a positive predictive value of 0.3%



## **Screening Tools**

- Generally low sensitivity and specificity
- Example
  - Risk of Suicide Questionnaire 4 questions
    - > Are you here because you tried to hurt yourself
    - > In the past week have you had thoughts of killing yourself
    - > Have you ever tried to hurt yourself in the past
    - > Has something very stressful happened in the past few weeks.
- 37% specific for High Risk cases in Adolescents presenting to ED, leading to large number of low risk cases progressing to full assessment



## **Screening Tools**

- Extrapolating from other high risk groups the ability to screen remains poor.
- People followed up one year post admission to Inpatient Psychiatric Unit
- Risk categorised along known risk factors
  - > History of self harm, depressive symptoms, unplanned discharge, social difficulty, Dx MDE, loss of contact with services, male gender
- Only 3% of patients categorised as high risk commit suicide
- 60% of patients who suicide categorised as low risk



#### Interventions

- Risk Containment
  - Environment
  - Observations frequency, personnel
  - Restraint? Controversial.
  - Symptom reduction medication
  - Commence definitive treatment
  - Time to review



#### Interventions

- Specific Psychiatric treatments
  - Lithium for Bipolar Affective Disorder
  - Clozapine for Schizophrenia
  - DBT for Borderline Personality Disorder
- Population based interventions
  - Gun control
  - Bridge barriers (car park barriers)
  - Replacement of coal gas with natural gas



### **Clinical Issues**

- When to do a risk assessment?
- Risk assmt's at various clinical stages, and at transfers between places of care.
- Who should do the risk assessment?
  - ED Doctor
  - Psych triage nurse (where available)
  - Psychiatrist or registrar



## Risk Assmt Vs Risk Management

- The management plan for a patient at risk is the management plan for the psychiatric disorder, with the risk taken into account.
- The risk will influence care in a number of ways: venue of care, choice of Tx etc
- Sometimes there is a conflict between the best Mx of risk and best Mx of the disorder



#### Should we do risk assessment?

- <u>Probably</u>, but only in certain circumstances: current psychiatric symptoms, presence of suicidal ideation, any self harm attempt, ?other
- Should it be structured? Probably, but there is no current agreed tool.
- Who should do it? <u>All staff</u>, not just psychiatry, and it should help inform the urgency of psychiatric assessment.
- What are the potential dangers: That resources will be directed towards risk management (of which outcomes are not established) at the expense of evidence based treatments for disorders (depression, anxiety etc)



## Minimum standard for medical units?

- Be competent and comfortable asking about self harm
- Basic psychiatric screen for depression
- Routine MMSE or equivalent for delirium recognition



#### What to do about delirium & suicide risk

- Delirium poses a particularly challenging problem
- The risk assessment is particularly poor, as the patients mental state fluctuates, and therefore assessment is unreliable
- Paranoid and other psychotic symptoms occur in 30%, and these often lead to ideas of being attacked (like in a nightmare) and attempts to escape and sometimes harm self
- Many delirious patients are either unrecognised, or recognised but 'hypoactive' therefore not closely observed, and can't observe all delirious patients, there are too many.
- Basic precautions: recognition, check for paranoia, nurse in a safe environment (visible, no hanging points/windows, etc), appropriate tranquiliser use, good handover/communication, escalate care if failing to improve.