

Suicide Risk Assessment in Acute Care Settings: A Synopsis

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Good review for all clinicians



Clear, thought provoking review of key psychiatric concepts, even for non psychiatrists!

Mar 13

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Season 1: Fundamentals	Season 2: Diagnosis	Season 3: Consult-Liaison
How to Use the DSM	Essentials of Psychiatric Diagnosis	Making Magic Moments
Clinical Interviewing	Medical Mimmickers	Supportive Psychotherapy
Mental Status Examination	Psychiatric Epidemiology	Catatonia
Suicide Risk Assessment	Delirium	Neuropsychiatric Symptoms of Dementia
Management of Agitation	Substance Use Disorders	Transplant Psychiatry
Case Formulation	Bipolar Disorders	Decisional Capacity (Improved)
Decisional Capacity	Borderline Personality Disorder	Eating Disorders
Intro to Psychotherapy	Depressive Disorders	Perinatal Psychiatry
Violence Risk Assessment	Anxiety Disorders	Functional Neurological Disorders
	PTSD	Malingering/Factitious Disorder
	Schizophrenia	

Learning Objectives

- Appreciate suicide risk factors that may be modifiable by primary care physicians
- Explore various theories for suicide completion
- Practice a traditional comprehensive suicide risk assessment by weighing risk and protective factors
- Practice a suicide risk assessment using the "Four C's" of comprehensive suicide risk assessment

Quick Epidemiology

- Suicide rates worldwide have been declining, with an 18% reduction from 2000 to 2016
- The exception is the U.S. where rates have increased by 1.5% annually since 2000.
 - Suicide rates among men aged 45-64 have **increased by about 50%** from 1999 to 2017 (from 21 per 100,000 to 30 per 100,000)
- In US:
 - **Suicide is tenth leading cause of death**
 - Third leading cause of death for children, adolescents and young adults.
- Men are about twice as likely than women to complete suicide (15.6 vs 7.0 per 100,000 globally)

(CDC 2019, Pruitt 2017, Stone 2018)

Goals of a Psychiatric Encounter

- 1) **Establish and maintain a therapeutic alliance**
- 2) Gather relevant clinical information
 - Exact information depends on context. A comprehensive evaluation for a patient who is able to function at work and complains of anxiety will be very different than interaction with an agitated patient in the ED.

Don't we have simple screening tools for this?

- Sure.
 - The US National Strategy for Suicide Prevention recommends the use of suicide prediction tools (US Surgeon General, 2012)
- But... they're not very good.
 - "Current screening tools have an unacceptably high false-positive prediction rate (that is, many persons determined to be "at risk" never have clinically significant suicidal thoughts or behavior) and a low degree of accuracy for identifying true cases (that is, a substantial portion of persons who die by suicide are not identified by the screening tools)." (Sall 2019, Annals of Internal Medicine)
 - PHQ-9 is recommended for routine use (item 9 predicts both suicide attempts and deaths within year of administration)
 - C-SSRS not recommended for routine use, low evidence of utility



		REAL WORLD CONDITION - 1,000,000 people 120 will die of suicide 999,880 will not die of suicide	
		ACTUALLY, IN REALITY:	
THE BEST TESTS WE HAVE		Suicide Death	Not Suicide Death
Will Die of Suicide	True positives (TP) 113	False Positives (FP) 359,957	
Will Not Die of Suicide	False Negatives (FN) 7	True Negatives (TN) 639,923	

Positive Predictive Value

0.03133%

Negative Predictive Value

99.9989%

(remember,
base negativity is 99.988%)

Despite machine learning, incredible tools and scales, we have no test currently that beats:

Sensitivity
94%

Specificity
64%

1 in 3200 positives will be a true positive.

"There is no clinical value to any suicide prediction tool in existence." (Black 2023)

Suicide Risk Assessment: Standard of Care

- "Comprehensive clinical assessment."
- Assess risk and protective factors. Document clinical reasoning.
- My suggestion: Suicide is unpredictable. This doesn't mean that our interventions are futile. The question should not be, "will this person die by suicide?" The question should be, "what can/should we do to reduce this patient's suicide risk?"
 - What can a primary care physician do to decrease a patient's suicide risk?

How can an internist modify suicide risk?

Table 1. Risk Factors for Suicide.		
Risk Factor	Strength of Association with Suicide	Quality of Evidence*
Precipitating factors		
Drug and alcohol misuse ¹²	Strong	High
Access to lethal means ¹⁵	Moderate	High
Life events ¹⁶	Moderate	High
New diagnosis of terminal or chronic physical illness ¹⁷	Moderate	Moderate
Media effects ¹⁸	Weak	Moderate
Predisposing factors		
Neuropsychiatric disorders ¹²	Strong	High
Family history of suicidal behavior ¹⁹	Strong	High
Previous suicide attempt ²⁰	Moderate	High
Adverse childhood experiences ²¹	Moderate	Moderate
Socioeconomic deprivation ²²	Weak	Low

* Low quality indicates reported associations alone, moderate quality indicates reported associations that have been replicated in different settings, and high quality indicates associations that are supported by evidence from quasi-experimental studies or clinical trials.

A paradox?

- In high income countries, mental illnesses are estimated to be present in **half** of persons who have died by suicide, with affective disorders (depression and bipolar disorders) involved in 33-50% of suicides (Baldessarini 2006).
 - So – no identifiable mental illness in half of suicides

Table 2 – Risk and protective factors for suicide

Risk factors	Protective factors
<ul style="list-style-type: none">• Mental illness• Previous suicide attempt• Serious physical illness/chronic pain• Specific symptoms• Family history of mental illness and suicide• History of childhood trauma• Shame/despair• Aggression/impulsivity• Triggering event• Access to lethal means• Suicide exposure• Inflexible thinking• Genes: stress and mood	<ul style="list-style-type: none">• Social support• Connectedness• Strong therapeutic alliance• Access to mental health care• Positive attitude to mental health treatment• Coping skills• Problem solving skills• Cultural/religious beliefs• Biological/psychological resilience

Exercise...

- Weigh the relevant risk and protective factors for suicide.
- Are you able to determine if this patient is high risk, low risk, intermediate risk?
- Treatment plan --> Does this patient require admission to the inpatient psychiatry unit for stabilization, or is outpatient treatment advisable?

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Sharing

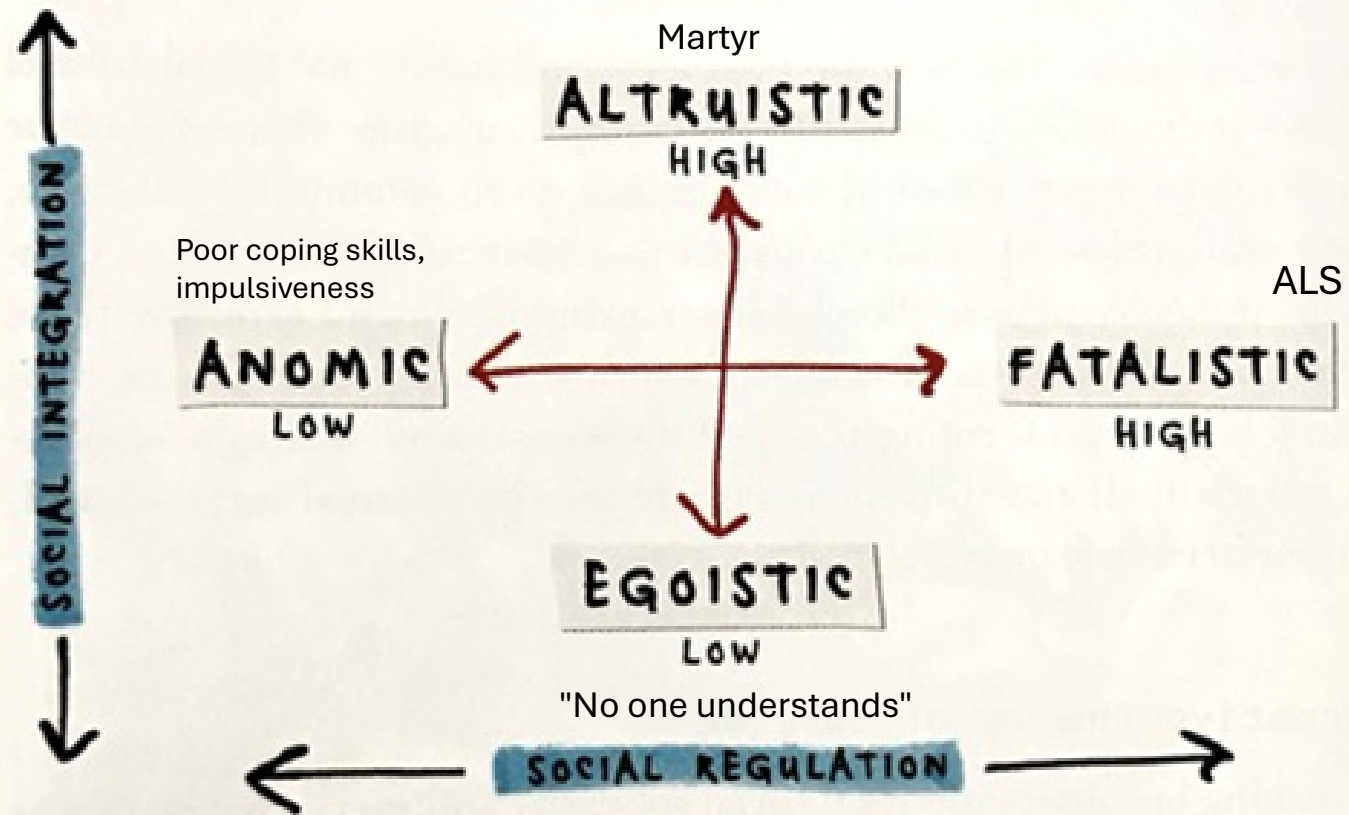
- What were the risk and protective factors that you identified?
- What is your dispositional decision?

Alternative Approaches to Suicide Risk Assessment

- Much ink has been spilled across the ages and across various disciplines (sociology, psychology, philosophy, social work) regarding underlying motivations for suicide
- We will briefly discuss:
 - Durkheim's typology of suicide
 - Joiner's Interpersonal Model of Suicide
 - The "Four C's" of Suicide Risk Assessment
 - With another vignette

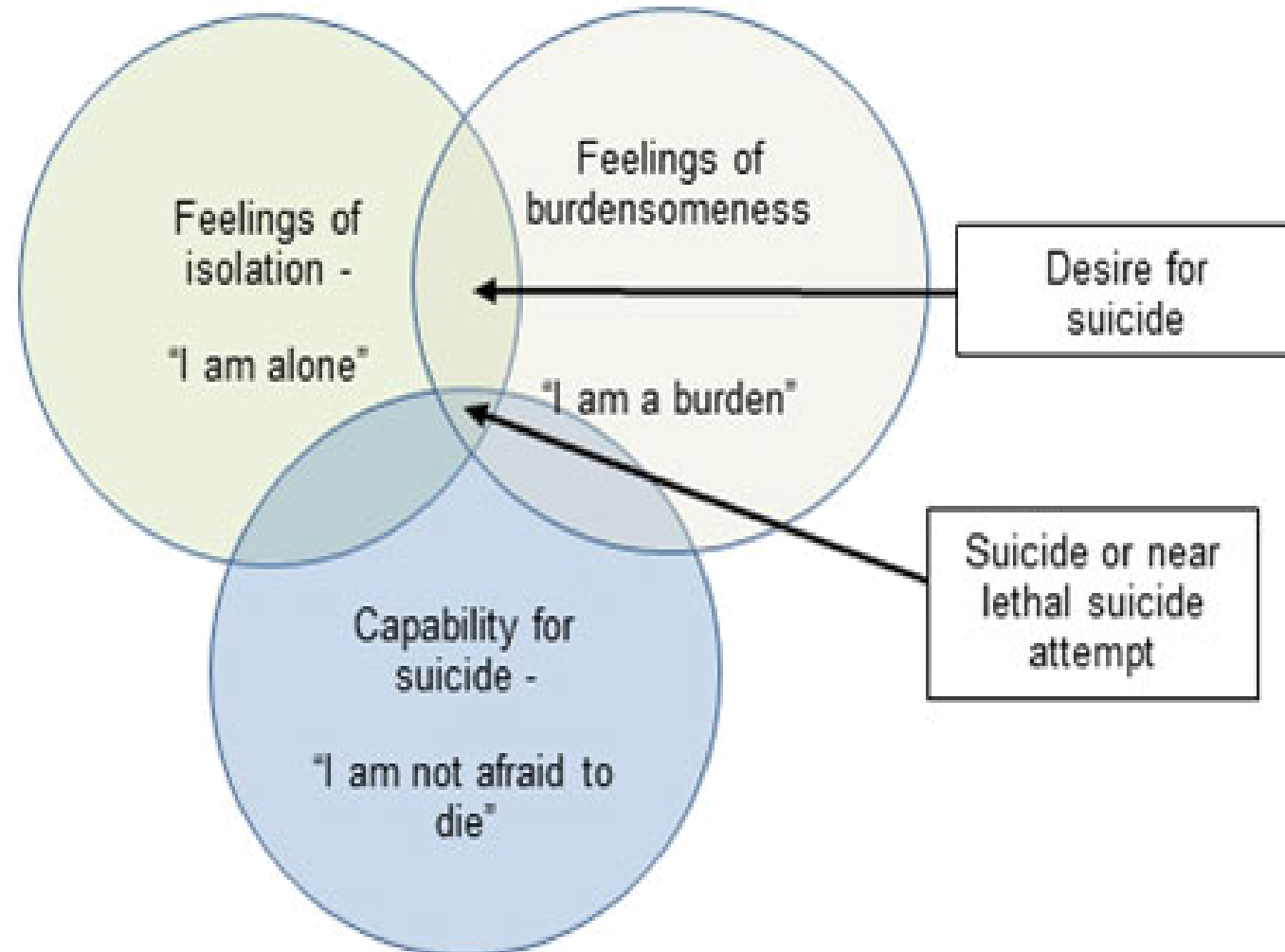
Durkheim's Typology of Suicide

FIGURE 6.1 | A Normative Theory of Suicide



Joiner's Interpersonal Model for Suicide

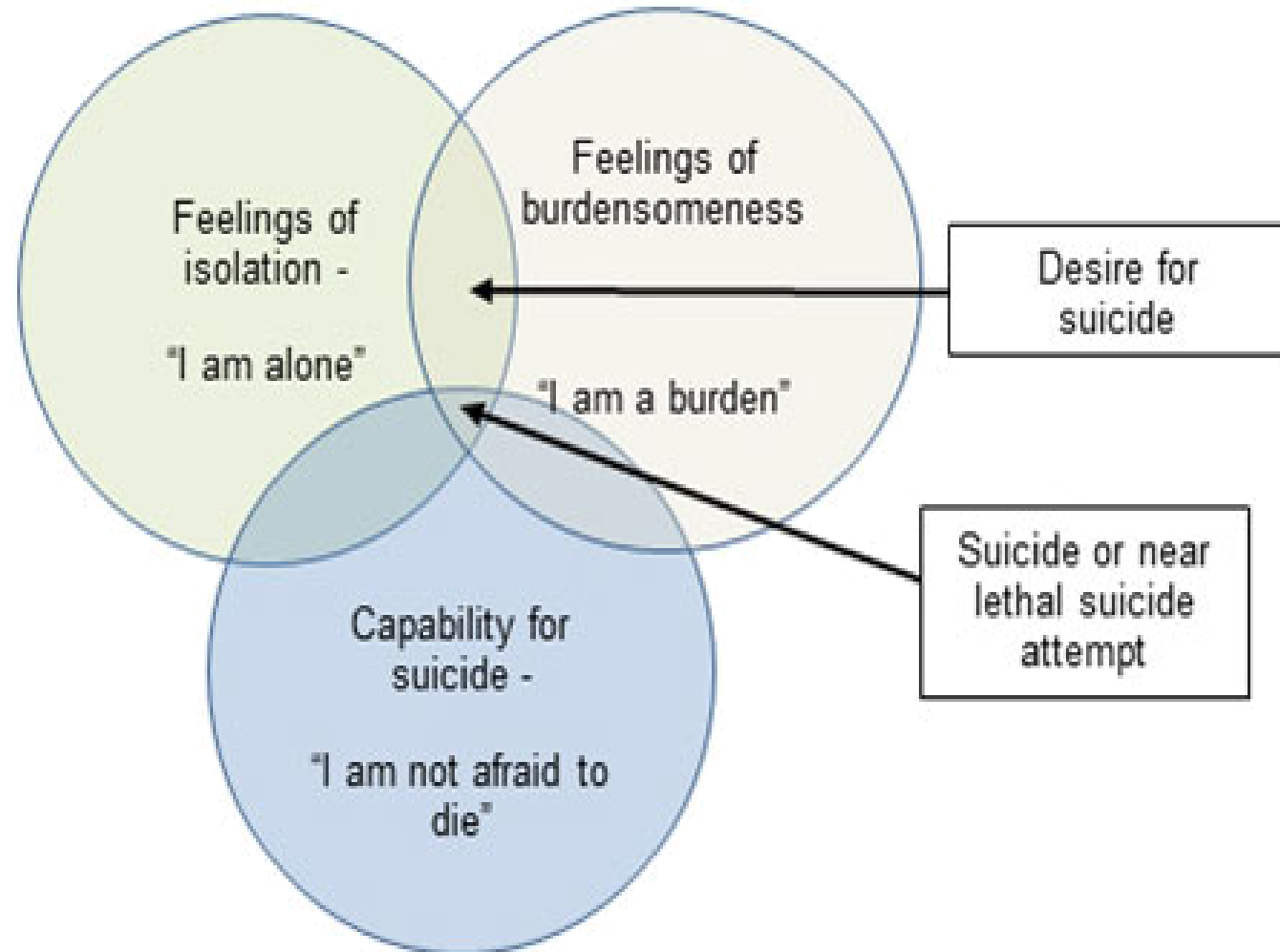
Concept: Relationships (meaning?) the most important factor in preventing suicide



Joiner 2009

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The "Four C's"

1) Confidence

- Are we confident in the veracity of the information we have elicited?
- Are we confident in our risk assessment?

2) Corroboration (Collateral)

- Other than patient interview, are there other sources of information available to us?
 - Family/support persons, police, medical record, labs

3) Changeability

- Will hospitalizing this individual allow us to change anything about this person's suicide risk?
- Will hospitalizing this individual reinforce maladaptive behaviors?

4) Common Sense

- What would a third party with a brief synopsis of the situation opine?
- How will you sleep tonight?

Exercise...

- Use the "Four C's" to perform a comprehensive suicide risk assessment
- Are you able to determine if this patient is high risk, low risk, intermediate risk?
- Treatment plan --> Does this patient require admission to the inpatient psychiatry unit for stabilization, or is outpatient treatment advisable?

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Conclusion

- Questions or discussion?
- How can your local consultant psychiatrist serve you more effectively?