

# Approach to Suicide Risk Assessment Using the 3-Step Theory



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# Disclosures

- I have no actual or potential conflicts of interest in relation to this presentation.

# Objectives

- Understand the “3-Step” theory of suicide and how it may be used in a suicide risk assessment along with typical screening questions
- Use three case examples to demonstrate applicability of this approach

# Suicide Statistics



Over

**49,000**

people died by  
suicide in 2022



**1** death every

**11** minutes

Many adults think about  
suicide or attempt suicide

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**13.2 million**

Seriously thought about suicide

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**3.8 million**

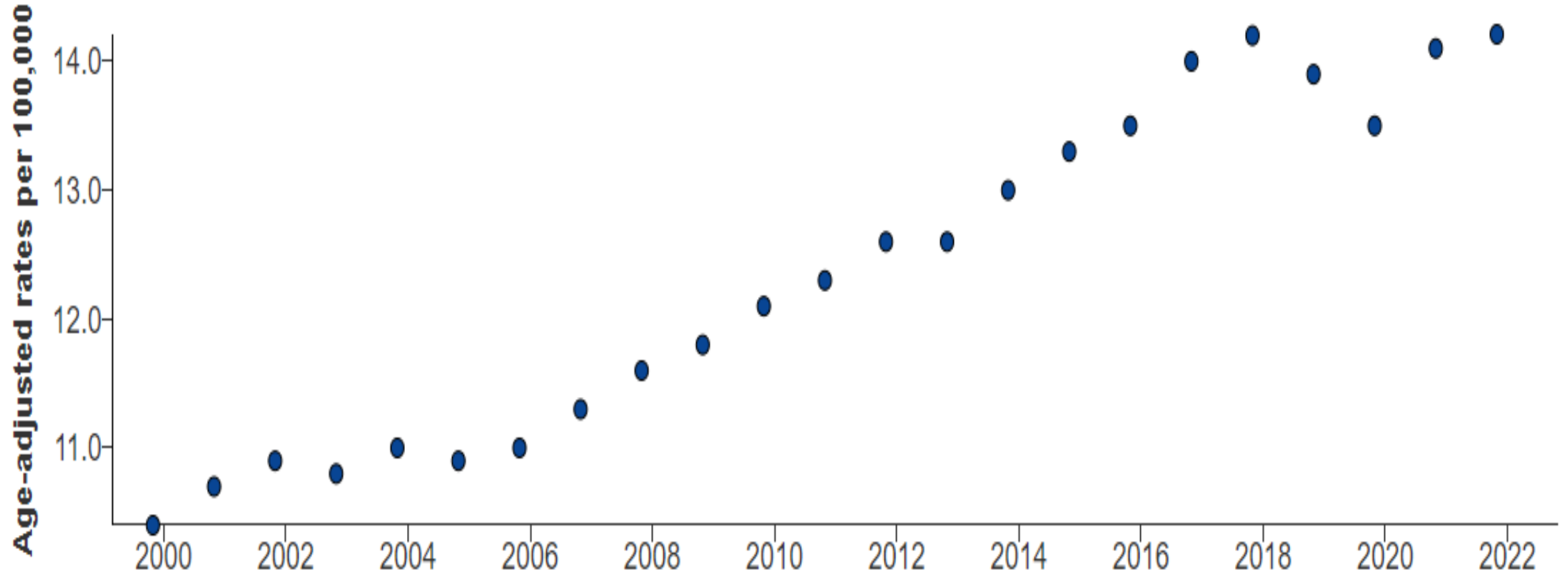
Made a plan for suicide

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**1.6 million**

Attempted suicide

# Suicide Statistics

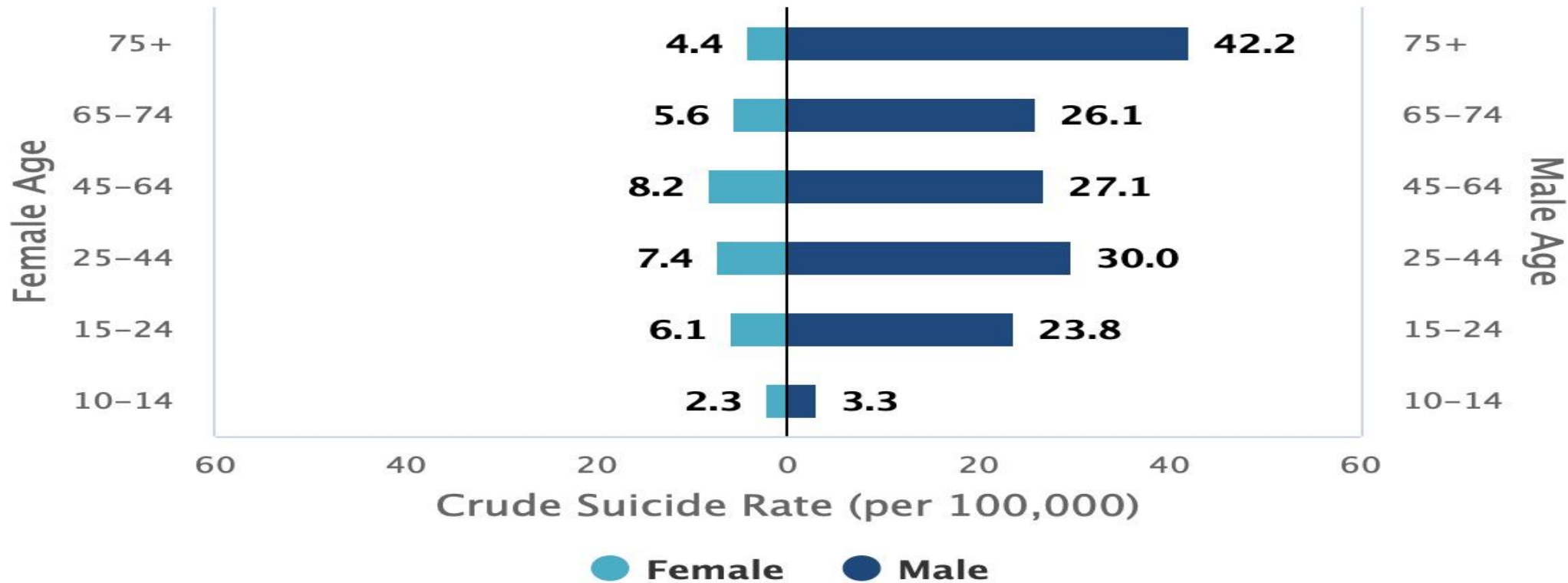






# Suicides by Age Group and Sex

Suicide Rates by Age Group (2021)  
Data Courtesy of CDC



# Suicide Risk Factors

## **Static**

- Male
- Native American or White
- Older men
- Unmarried
- Past suicide attempt
- Family hx of suicide
- Chronic medical illness

## **Dynamic**

- Substance abuse
- Unemployment
- Feelings of hopelessness
- Lack of social support
- Rejection
- Fall in status
- Severe anxiety
- Global insomnia
- Recent alcohol abuse
- Current psychiatric illness



# Suicide Risk Factors

- The most important measure of a suicide risk factors would be positive predictive value (PPV)
  - Probability of how often someone is “positive” for measure and actually has the disease
  - Prevalence of an outcome/disease is directly proportional to PPV
  - The low prevalence of suicide results in poor PPV for risk factors

# Suicide Risk Factors

- Review of seven meta-analyses investigating risk factors for suicide and completed suicide
- None of the analyses found any individual risk factor, including suicidal thoughts and behaviors was sufficiently accurate to guide clinical decision making

# Suicide Risk Factors

“No high-risk determination, whether based on a model that integrated multiple risk factors or a suicide risk scale was strongly associated with later death by suicide.”

# Suicide Risk Factors

“Moreover, almost half of all patients who die by suicide come from lower risk strata, indicating a low sensitivity in high-risk status.”

# Identifying those with thoughts of suicide

- Those who have made a recent suicide attempt
- Those who report thoughts of suicide spontaneously
- Those who admit to such thoughts through direct questioning
- Common screening instruments
  - Columbia Suicide Severity Rating Scale
  - Ask Suicide-Screening Questions (ASQ)
  - Last item of the PHQ-9
    - “Thoughts that you would be better off dead, or thoughts of hurting yourself in some way”

# Assessing nature of the thoughts

- When did these thoughts start and what do think is behind it?
  - Precipitant?
- How often and long do you think about it?
- When is the last time you have thought about it?
- Have you thought about how you might do it?
  - Research of methods
  - Any other methods?
  - How have you made any preparations to carry this out?
  - Have you practiced or rehearsed this plan?
- Have you started to make any arrangements such as writing note to others or given items away?
- What stopped you from carrying through with it?
- Are you intent on carrying this out?



# Assessing nature of actual attempt

- Impulsive versus planned
- Lethality of method
- Likelihood of rescue
  - Preparation against discovery or intervention
  - Alone or in front of others
  - Communication prior to attempt (texts, social media, etc.)
- Arrangements prior to death
  - Giving away belongings, financial arrangements, leaving a note for others at scene, etc.
- Feelings about surviving attempt

# May, Pachowski, & Klonsky (2020)

## Motivations for suicide: Converging evidence from clinical and community samples

- Evaluated main reasons for having attempted suicide
  - Adult psychiatric inpatients (n=59) with recent suicide attempts (median 3 days prior)
  - Community participants (n=222) who had attempted suicide a median of 5 years earlier
- Used the Inventory of Motivations for Suicide Attempts (IMSA; May & Klonsky, 2013)
  - 54 item self-report measure assessing motivations for suicide
  - Informed by the major theories of suicide

May, Pachowski, & Klonsky (2020)

Motivations for suicide: Converging evidence from clinical and community samples

- **Psychache**

- “My state of mind was too unbearable”
- “My emotions were too overwhelming to handle”

- **Hopelessness**

- “I lost all hope that things would get better in the future”
- “I didn’t think things would get better, no matter what I did”

May, Pachowski, & Klonsky (2020)

Motivations for suicide: Converging evidence from clinical and community samples

- **Escape**

- “I couldn’t stand being aware of my failings anymore”
- “I hated myself so much”

- **Problem solving**

- “I needed to get out of an impossible situation”
- “It seemed like the best way to deal with my problems”  
(e.g., personal, financial)

May, Pachowski, & Klonsky (2020)

Motivations for suicide: Converging evidence from clinical and community samples

- **Impulsivity**

- “I didn’t have a reason, it just happened”
- “It was a spur of the moment decision”

- **Burdensomeness**

- “I wanted to make my family better off”
- “I was causing too much trouble for those around me”

# May, Pachowski, & Klonsky (2020)

## Motivations for suicide: Converging evidence from clinical and community samples

- **Influencing others**

- “I wanted to make people feel sorry for the way that they treated me”
- “I hoped to influence the actions of people around me”

- **Help seeking**

- “I wanted to get help from someone”
- “I needed to make other people understand how distressed I was”

- **Other**

- “I was so humiliated I couldn’t show my face again”
- “I was so lonely I couldn’t handle it”



# May, Pachowski, & Klonsky (2020)

## Motivations for suicide: Converging evidence from clinical and community samples

- Across inpatient and online samples
  - **Psychache, Hopelessness, and Escape** had highest mean endorsement
  - Interpersonal influence, Help-seeking, and Impulsivity had lowest
  - Two scales rated at least “important” by over 90% of both samples
    - Psychache (95% inpatient sample; 91% online sample)
    - Hopelessness (95% inpatient sample; 96% of online sample)

# Reasons for Living Inventory (Linehan et al. 1983)

- **Survival and Coping Beliefs**

- “I still have many things left to do”
- “I believe that I can find a purpose in life, a reason to live”
- “I believe that I can find other solutions to my problems”
- “No matter how badly I feel, I know that this will not last”

# Reasons for Living Inventory (Linehan et al. 1983)

- **Responsibility to Family**

- “I would hurt my family too much and I would not want them to suffer”
- “I have a responsibility and commitment to my family”

- **Child-Related Concerns**

- “The effect on my children would be harmful”
- “I want to watch my children as they grow”

# Reasons for Living Inventory (Linehan et al. 1983)

- **Fear of suicide**

- “I am afraid of the actual “act” of killing myself (pain, blood, violence)”
- “I am so inept that my method would not work”

- **Fear of social disapproval**

- “Other people would think I am weak and selfish”
- “I would not want others to think that I did not have control over my life”

- **Moral objections**

- “I am afraid of going to hell”
- “I consider it morally wrong”

# Reasons for Living Inventory (Linehan et al. 1983)

- Use of Reasons for Living Inventory with community sample and inpatient psychiatric samples
  - **Survival and Coping Beliefs**- Those in community sample who had history of suicidal behavior and inpatient sample who had recently attempted suicide scored lower
  - **Responsibility to Family and Child related concerns**- Community sample and inpatient sample who had never considered suicide scored higher
  - **Fear of suicide**- Distinguished those with history of attempts versus those who had considered suicide but did not attempt
  - Other factors- not as helpful distinguishing groups

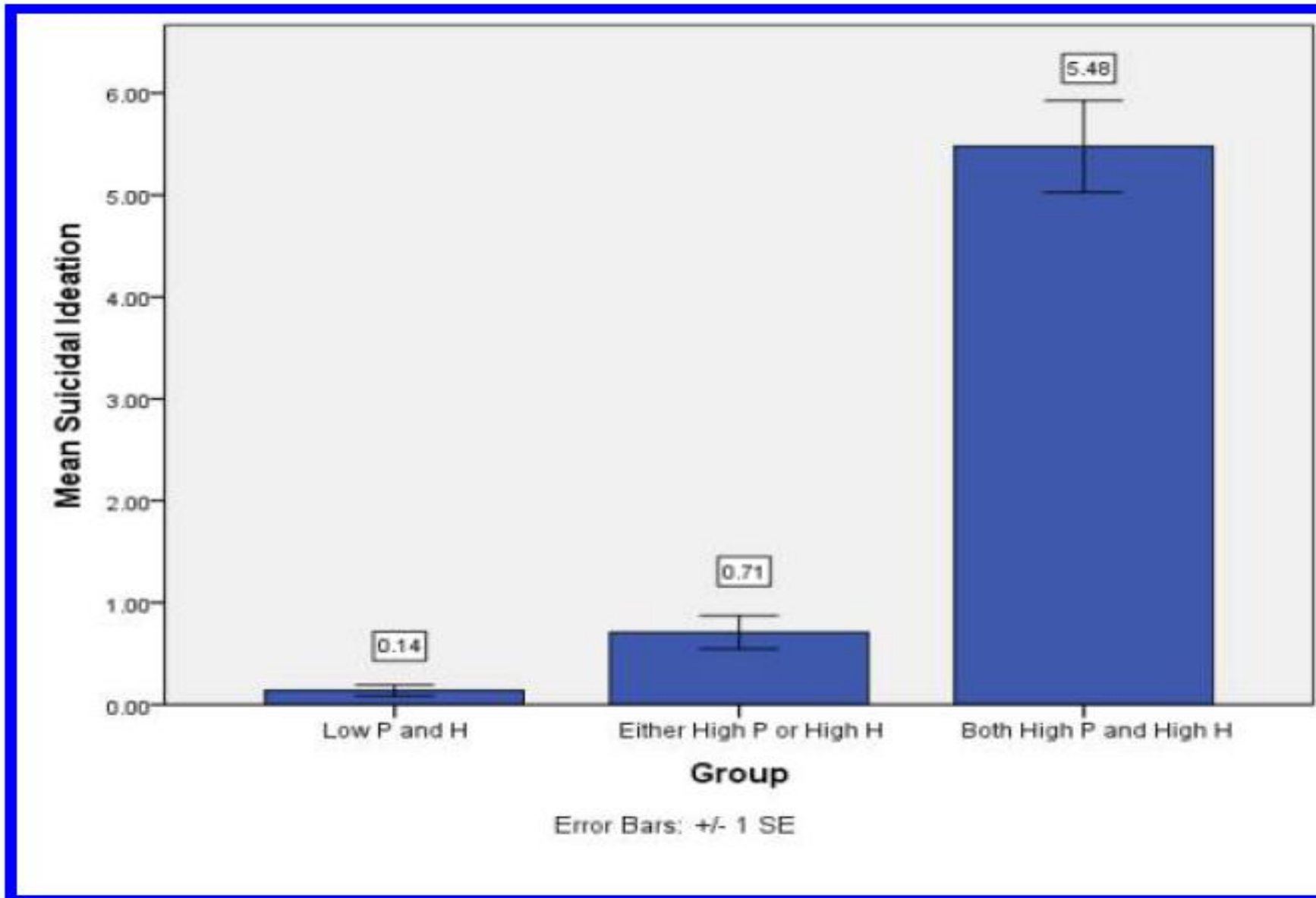
# Three Step Theory (3ST) of Suicide

- Evidence-based theory explaining suicide in terms of three factors:
  - Pain combined with hopelessness
  - Connectedness
  - Capability for suicide
- Does not take into account other elements of “ideation” such as planning and preparing for suicide, demographic and other static factors
- Already being incorporated into suicide prevention training and self-help resources



# Three Step Theory (3ST) of Suicide

- Step 1: *The combination of pain and hopelessness causes suicidal desire*
- Pain
  - Most commonly psychological pain (psychache)
- Hopelessness
  - Situation won't change with time or effort



**FIGURE 2. Interactive effects of pain (P) and hopelessness (H) on suicidal ideation.**

Klonsky E, May A. (2015) The Three Step Theory of Suicide (3ST): A New Theory of Suicide Rooted in the "Ideation to Action" Framework. *International Journal of Cognitive Therapy*. 8(2): 114-129

# Three Step Theory (3ST) of Suicide

- Step 2: *Suicidal desire intensifies when pain exceeds or overwhelms connectedness*
- Connectedness to:
  - Close family and friends
  - Broader community
  - Valued identity or role
  - Sense of meaning

# Three Step Theory (3ST) of Suicide

- Conditions in which Step 2 can be met:
  - Individual does not have connectedness to begin with
  - Pain reaches peaks of extreme intensity overwhelming connectedness
  - Pain may impair the ability to engage with those things that bring one connectedness

# Three Step Theory (3ST) of Suicide

- Step 3: *Strong suicidal desire progresses to suicide attempt if capability for suicide is present*
- 3 contributors to suicide capability
  - Acquired
  - Dispositional
  - Practical

# Three Step Theory (3ST) of Suicide

- Acquired capability
  - First described in the Interpersonal Theory of suicide (Joiner, 2005)
    - We are naturally disposed to avoid pain, injury, and death
    - One may habituate to fear of above through:
      - Nonsuicidal self-injury
      - History of physical or sexual abuse
      - Working in emergency or medical professions
    - These experiences reduce fear of self-inflicted pain, injury, and death

# Three Step Theory (3ST) of Suicide

- Dispositional capability
  - Temperamental factors that may decrease aversion to self-inflicted injury or death
    - Low harm-avoidance
    - Low pain sensitivity
    - Lack of squeamishness
- Practical capability
  - Access and knowledge of lethal means
    - Firearm access
    - Medical knowledge
    - Privacy

# Three Step Theory (3ST) of Suicide

- Evidence for Step 1 (*The combination of pain and hopelessness causes suicidal desire*)
  - Combination of pain and hopelessness accounts for a very large amount of variance in suicidal desire in psychiatric inpatients and in community samples
  - Pain and hopelessness were strongest motivations for suicide across five different samples of those with suicide attempt hx who were given the Inventory of Motivations for Suicide Attempts



# Three Step Theory (3ST) of Suicide

- Evidence for Step 2 (*Suicidal desire intensifies when pain exceeds or overwhelms connectedness*)
  - Five studies measured difference between pain and connectedness and correlated to suicidal desire
    - Connectedness was protective of suicidal desire in those with high pain and hopelessness

# Three Step Theory (3ST) of Suicide

- Evidence for Step 3 (*Strong suicidal desire progresses to suicide attempt if capability for suicide is present*)
  - Three studies examined whether capacity distinguishes those with history of attempts from those with history of ideation only
    - All three studies found moderate to large elevations in capability in attempter group relative to ideator-only group

# Three Step Theory (3ST) of Suicide

- Utility of 3ST Theory
  - Used as part of suicide risk assessment to help clarify risk
  - Not a tool for long term prediction of suicide
  - Helps inform biopsychosocial treatment approach

# Sample interview questions

- Step 1 (*The combination of pain and hopelessness causes suicidal desire*)
  - **“If your current situation didn’t change, could you tolerate the way you feel?”**
  - **“As you look into the future, do you see things getting better as a result of either your own efforts or natural change?”**

# Sample interview questions

- Step 2: *Suicidal desire intensifies when pain exceeds or overwhelms connectedness*
  - **“Can you tell me some of your reasons for *not* killing yourself like staying alive for your family or important things you have left to do or experience?”**
  - **“Do you think these reasons are strong enough to keep you from killing yourself?”**
- Step 3 (*Strong suicidal desire progresses to suicide attempt if capability for suicide is present*)
  - **“Do you think you would ever be able to go through with the act of killing yourself?”**

# Case 1

- A 55-year-old combat veteran presents to his primary care clinician with complaints of worsening depression despite antidepressant treatment
- He describes recently being denied a promotion at work, serious financial troubles, and separation from his wife around 3 months ago and is currently living alone in an apartment
- His alcohol use has been escalating
- One previous attempt at suicide by overdose 5 years ago after a job loss

# Case 1

- He admits that he has been thinking of suicide for the last couple of months, on a daily basis, for hours at a time and considers ways in which he might complete suicide (firearms or hanging) but denies that he is currently intent upon doing so but cannot give reason why that is
- He recently gave his little brother his set of golf clubs and sent an email to an old friend of his apologizing for something he did a few years ago in preparation should he carry through with it

# Case 1

- **“If your current situation didn’t change, could you tolerate the way you feel?”**
  - “I don’t know if I can go on like this too much longer, I hate getting up in the morning and all I look forward to is coming home having a few drinks and going to bed.”



# Case 1

- **“As you look into the future, do you see things getting better as a result of either your own efforts or natural change?”**
  - “I’ve tried my best to work things out at my job for a long time now and it just doesn’t seem to matter what I do, I keep getting turned down for promotions or a pay raise. Same thing happened with my last job.”

# Case 1

- “My wife and I tried counseling and it just made things worse honestly. I’ve always had a hard time making things work with her, I don’t think there is any chance we will work things out.”
- “This is maybe my third medication I’ve tried for depression; I’ve been on it for three or four months and it does nothing.”

# Case 1

- **“Can you tell me some of your reasons for *not* killing yourself like staying alive for your family or important things you have left to do or experience?”**
  - “I want to stay alive for my kids I guess but honestly they barely call me since my wife and I separated and I think I’ve probably done more harm in their lives than good...I can’t think of a real reason I get out of bed in the morning other than going to work and this job is going nowhere”

# Case 1

- **“Do you think you would ever be able to go through with the act of killing yourself?”**
  - “Maybe not, I don’t know.”

# Case 1

- Nature of thoughts- daily thoughts for last couple of months for hours at a time, consideration of very lethal methods, some preparatory behaviors (giving away possessions, making amends)

# Case 1

- Step 1
  - Psychological pain
    - Severe level of depression
    - Sense of failure with family and career
    - Financial stress is high
    - Loneliness
    - “I don’t know if I can go on like this too much longer”
  - Hopelessness
    - No confidence in improvement in his depression
    - Does not believe he will ever grow vocationally
    - No hope of reconciling with his wife

# Case 1

- Step 2
  - Connectedness
    - No sense of purpose in his life
    - Responsibility to family and child related concerns are very weak (feels they may be better off without him)
- Step 3
  - Capability
    - May have acquired capability with previous combat experience
    - Access to firearms
    - Alcohol abuse
    - Equivocal answer regarding his fear of suicide
    - Previous attempt at suicide

# Case 2

- A 42-year-old woman presents to the ED after her husband came home after work and found her to be in a stupor next to a half empty bottle of quetiapine that she had just filled. She is admitted to the hospital
- The next day the patient is alert and attentive and admits that she had tried to kill herself after she had been drinking and she had only been thinking of suicide for the last couple of days for very brief periods of time but thoughts went away when she would think of her family
- She admits that she has been dealing with a moderate level of depression but that medicines seem to help to a degree



## Case 2

- She reports that she was recently laid-off from a job she enjoyed and that she has been struggling with her child leaving for college in another state
- She states that she and her husband have not communicated well for the last few years and have a distant relationship and that she has also had a recent falling out with her daughter

## Case 2

- She denies any history of previous attempts at suicide
- She reports that she regrets what she did and says “it was stupid”
- Collateral information from her husband reveals that while she has seemed down about losing her job and was very upset after argument with their daughter, he is very surprised that she had done something like this and that she has never mentioned suicide to him

## Case 2

- **“If your current situation didn’t change, could you tolerate the way you feel?”**
  - “I really don’t feel as bad as I did that night, I was really sad over the argument with my daughter and thought that she would go off to college and not want to come back home and I’ve been really upset about losing my job thinking I would never work again or have to do something outside of my field. I think the alcohol made me feel so much worse about the situation. Yes, I’ve been really upset lately but I think I can get through this”

# Case 2

- **“As you look into the future, do you see things getting better as a result of either your own efforts or natural change?”**
  - “I guess I am worried about finding a job that I like as well as this last one but I think I can find something close to it”
  - “I don’t know why I was thinking my daughter wouldn’t want to talk to me again, we have been through arguments worse than this and we always make peace”
  - “As far as my marriage goes, I really don’t know. I guess we could think about marriage counseling. He actually mentioned it not too long ago”

## Case 2

- **“Can you tell me some of your reasons for *not* killing yourself like staying alive for your family or important things you have left to do or experience?”**
  - “I could never do that to my husband and daughter even though we haven’t been getting along. I have so much to be thankful for. I guess I wasn’t thinking about that when I was drunk”
  - “I’d say I also get a lot of joy out of the work I was doing and I think I can find work before too long”
  - “I want to be around to see my daughter graduate college and get married and have kids, that’s real important to me”

## Case 2

- **“Do you think you would ever be able to go through with the act of killing yourself?”**
  - “It scares me to think that I actually did try it but if I was sober I am not so sure I could do it again even if I wanted to”

## Case 2

- Nature of thoughts- brief considerations of suicide over last couple of days that went away when she thought of family with no planning or preparation for suicide prior to attempt.
- Nature of attempt- Impulsive attempt while intoxicated, only took half of the bottle of quetiapine, did carry this out privately but did it at home where she potentially could have been rescued. Regretful of attempt.

# Case 2

- Step 1
  - Psychological pain
    - She is unhappy about current situation with her job, marriage, and fight with daughter but is not in acute distress as she was that night while intoxicated
  - Hopelessness
    - She is discouraged about situation but believes that she ultimately will be able to find work, possibly start to work on relationship with husband in counseling, and is confident she will be able to make up with her daughter



# Case 2

- Step 2
  - Connectedness
    - Sense of responsibility to family seems high and though her relationships with her husband and daughter are conflictual, she values them deeply
    - She seemed to find great fulfillment in her profession
    - Wanting to be in her daughter's life for important milestones is very important to her
- Step 3
  - Capability
    - Her capability while using alcohol is worrisome but while sober this may be a difficult thing to carry out

# Case 3

- A 30-year-old teacher with a history of borderline personality disorder presents to the ED at the urging of her mother who brought her in after patient had texted her a message admitting that she had taken several pills in the middle of an argument with her boyfriend
- The patient admits that she took maybe 15 capsules of fluoxetine in front of her boyfriend
- When asked if she was trying to kill herself, she is not sure what she was thinking and did this impulsively

## Case 3

- She currently denies that she is considering suicide. She is calm but looks discouraged and embarrassed
- She has presented to the ED twice within the past two years under almost identical circumstances and has had three prior inpatient psychiatry admissions in her lifetime for suicide attempts
- Both of her most recent attempts were done in the middle of an argument with boyfriend

# Case 3

- Her boyfriend reports that she had been doing well over the last few months from a mood standpoint but when they argue they both tend to quickly escalate matters and he felt she did this “to make me stop yelling at her” and states that the only time she ever talks about suicide is when they are arguing
- Historically, after the overdoses, there is a reconciliation and the relationship seems to stabilize, he is more attentive and caring, and he starts drinking less

# Case 3

- **“If your current situation didn’t change, could you tolerate the way you feel?”**
  - “I get to a point where I can’t stand the arguing, shouting, and name-calling to where I can’t take it anymore but no matter what I say he still won’t stop, especially if he has been drinking”
  - “I just talked to him and he apologized and promised he would stop drinking so I guess there isn’t a situation right now; everything is alright”

# Case 3

- **“As you look into the future, do you see things getting better as a result of either your own efforts or natural change?”**
  - “I think we can work things out eventually; we always do I guess”
  - “He just promised me that he would stop drinking but he has promised this before so we’ll see”
  - “I just started therapy and I’m getting a little better with getting so overwhelmed when things like this happen. I need to work on communicating what I’m thinking and feeling when I’m upset”

# Case 3

- **Can you tell me some of your reasons for *not* killing yourself like staying alive for your family or important things you have left to do or experience?”**
  - “My family is very important to me and I can’t imagine what it would do to them if I did die. I feel really bad about doing this”
  - “I really like the work I do with kids, it makes me feel like I’m really making a difference”
  - “I have a lot of things left to do and see really”

## Case 3

- **“Do you think you would ever be able to go through with the act of killing yourself?”**
  - “After this kind of thing happens and I calm down, the thought of death actually scares me a lot, but in the moment, I don’t care what happens I guess. I’m not really thinking, it just happens so fast”



# Case 3

- Nature of thoughts- Very impulsive with unclear motivation other than stopping a stressful argument and changing boyfriend's behavior. No previous planning or preparation.
- Nature of attempt- Low lethality (previous attempts with same amount of medication), high likelihood of rescue (overdosed in front of boyfriend and texted mother immediately after), Regretful of attempt

# Case 3

- Step 1
  - Psychological pain
    - In the midst of heated arguments with boyfriend she can become intensely dysphoric to an intolerable degree but is feeling alright currently
    - Motivation may also be related to changing boyfriend's behavior
  - Hopelessness
    - She is currently holding out hope that her relationship and her ability to tolerate emotional distress can get better but while upset during arguments she tends to think in a black and white manner and can't see things getting better for her

# Case 3

- Step 2
  - Connectedness
    - Sense of responsibility to her family is high
    - She finds great fulfilment in her work with children
    - She values future experiences with travel
- Step 3
  - Capability
    - Her history shows that her capability for overdose is high but these have been low lethality attempts

# Summary

- Specific suicide risk factors are poorly predictive of suicide
- According to the 3-Step Theory of suicide, suicide is likely to occur in the setting of
  - **Intolerable pain and hopelessness that overwhelms connectedness to life and having the capability to carry through with suicide**
- Using this model along with general questions asked about nature of thoughts and/or attempt allow for a better-informed sense of imminent risk of suicide