

Adolescent Nonsuicidal Self-Injury

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Disclosures

- I am a resident of the University of Washington/Billings Clinic Psychiatry Residency
- No one gives me any other money to have any financial interests
- If someone is interested in giving me money, I would be interested

Objectives

- Differentiate Self Harm, Suicidal Injury, and Non-suicidal Self Injury
- Understand one model of non-suicidal self injury
- Feel more comfortable screening patients with Non-suicidal Self Injury

Nonsuicidal Self-Injury Disorder

- NNSI occurring on more than 5 days in 1 year
- Engagement in self-injurious behavior is done with expectation that it will cause 1) relief from negative feelings or thoughts 2) resolution of an interpersonal problem or 3) creation of a positive mood state.
- Act is preceded by 1) negative thoughts or feelings 2) preoccupation with planned self-injurious behavior that is hard to control 3) frequent thoughts of self-injurious behavior
- Socially sanctioned behavior (tattoos/body piercings) are excluded as is behavior done in a cultural/religious context. Common/mild behaviors are excluded (nail biting/scab picking)
- Engagement in NSSI results in clinically significant distress or problems in life functioning
- Not better explained by another disorder/diagnosis

DSM-V Definition

- Deliberate, self-inflicted destruction of body tissue without suicidal intent and for purposes not socially sanctioned, includes behaviors such as cutting, burning, biting, and scratching skin



Definitions

- Self-Harm –deliberate causing of pain or damage to self
- Self injury – deliberate pain or damage with intent to cause injury or pain
- Nonsuicidal Self Injury- deliberate pain or damage without intent





A Venn diagram illustrating the relationship between different types of self-harm. A large green oval represents the overall category of 'Self Harm'. Inside this oval, there are two smaller, overlapping circles. The circle on the left is red and labeled 'Suicidal Self Injury'. The circle on the right is blue and labeled 'Nonsuicidal Self Injury'. The two circles overlap, indicating that there is a common area between suicidal and nonsuicidal self-injury.

Self Harm

Suicidal Self
Injury

Nonsuicidal
Self Injury

A world map with a grey background. Landmasses are colored in shades of brown and yellow. Darker brown areas are concentrated in North America, Europe, and parts of Asia and Australia. Yellow areas are found in South America, Africa, and parts of Asia and Australia. The word "Demographics" is written in white text on the left side of the map.

Demographics

- More prevalent than SSI
- Female Prevalence
- ~18% of adolescents worldwide report NSSI (Higher in certain countries such as Germany and Canada)
- 17-38% in United States
- Peaks in Adolescence/Young Adulthood
 - Higher prevalence of NSSI in Preadolescent vs Adolescent Males

(Liu, Walsh, Cheek, & Sanzari, 2022)



Risk Factors

- Demographics
 - Female, Adolescent, Unemployed, Living Alone
- Familial
 - Physical/Mental Health issues in parents, Separated parents, Child/Parent Conflict
- Mental Health
 - Anxiety/Depression, hopelessness, Cluster B, Eating Dx, Affect Regulation, Substance, Aggression,
- Hx of Abuse
- Prior Behavior
- Parental Issues
 - EtOH, ADHD, Self-criticism, “Low Degree of compatibility/diligence”

(Plener, et al., 2018)

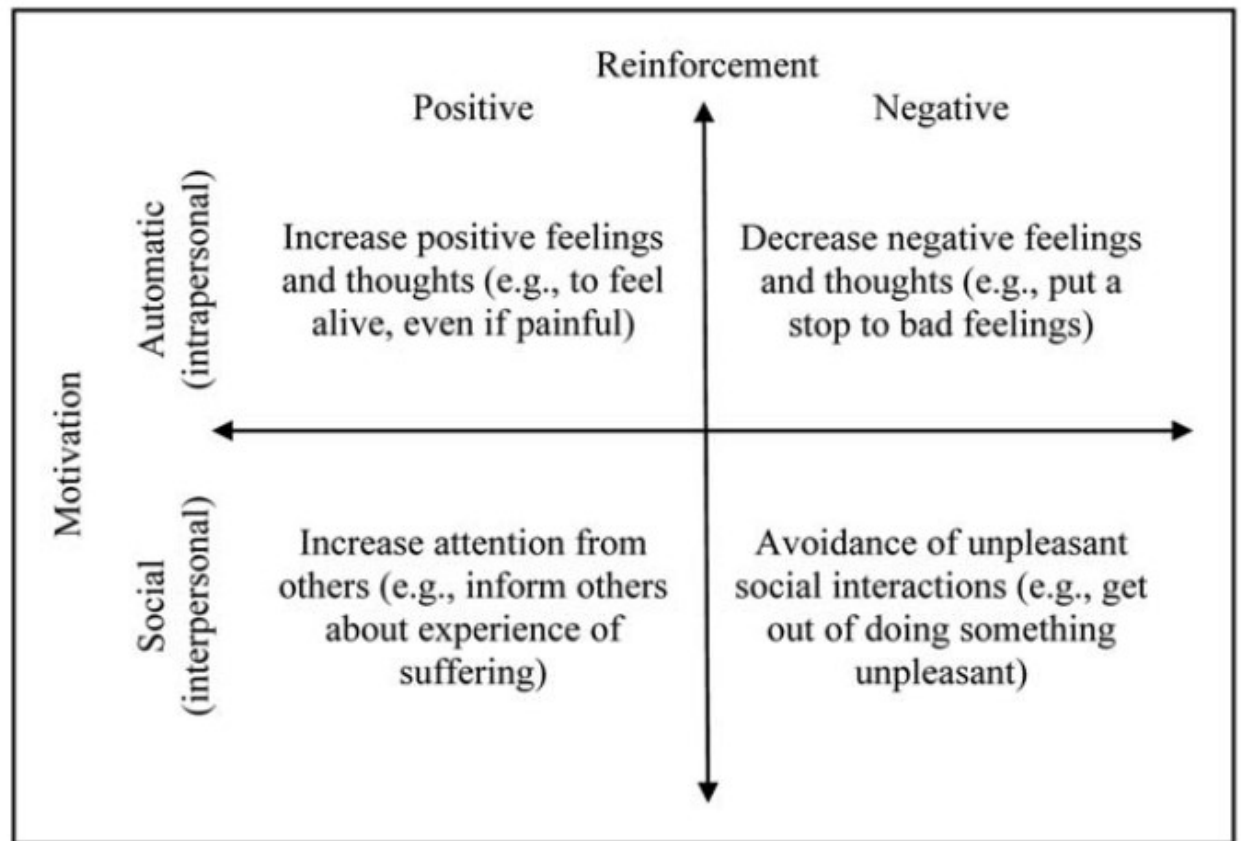


Why?

- We normally avoid pain, but sometimes our patients deliberately seek it out
- Self-injury causes a release of endogenous opioids and regulates physical pain
- Physical pain can be a distractor
- Method of control

(Hooley & Franklin, 2018)

Reinforcing NSSI



Emotion Dysregulation

- People with NSSI experience high levels of negative affect
- When negative affect becomes too high, NSSI is the regulation strategy that provides emotional relief
- (Hooley & Franklin, 2018)



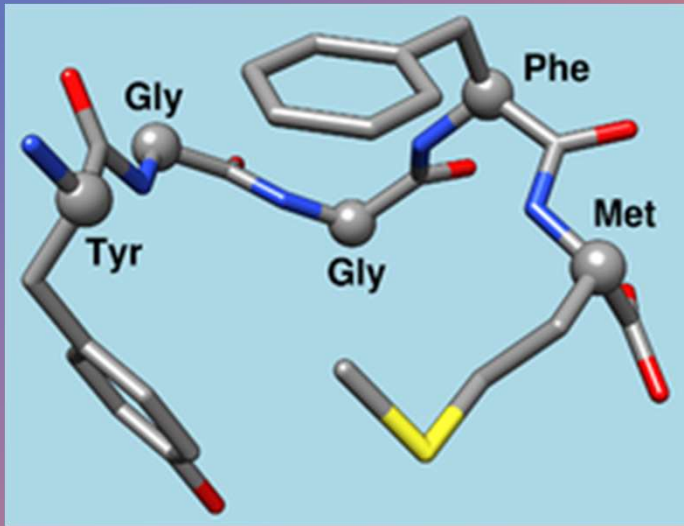


Four Function Model of NSSI

- Affect dysregulation or social dysregulation precedes NSSI and SSI
- NSSI and SSI brings about some affect or social regulation

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Opioid Homeostasis Model

- Some populations are believed to have lower baseline endogenous opioids or be less sensitive to them
- People naturally gravitate towards activities that increase endogenous opioid release
- Doesn't explain why less damaging methods of pain/opioid release are more often pursued

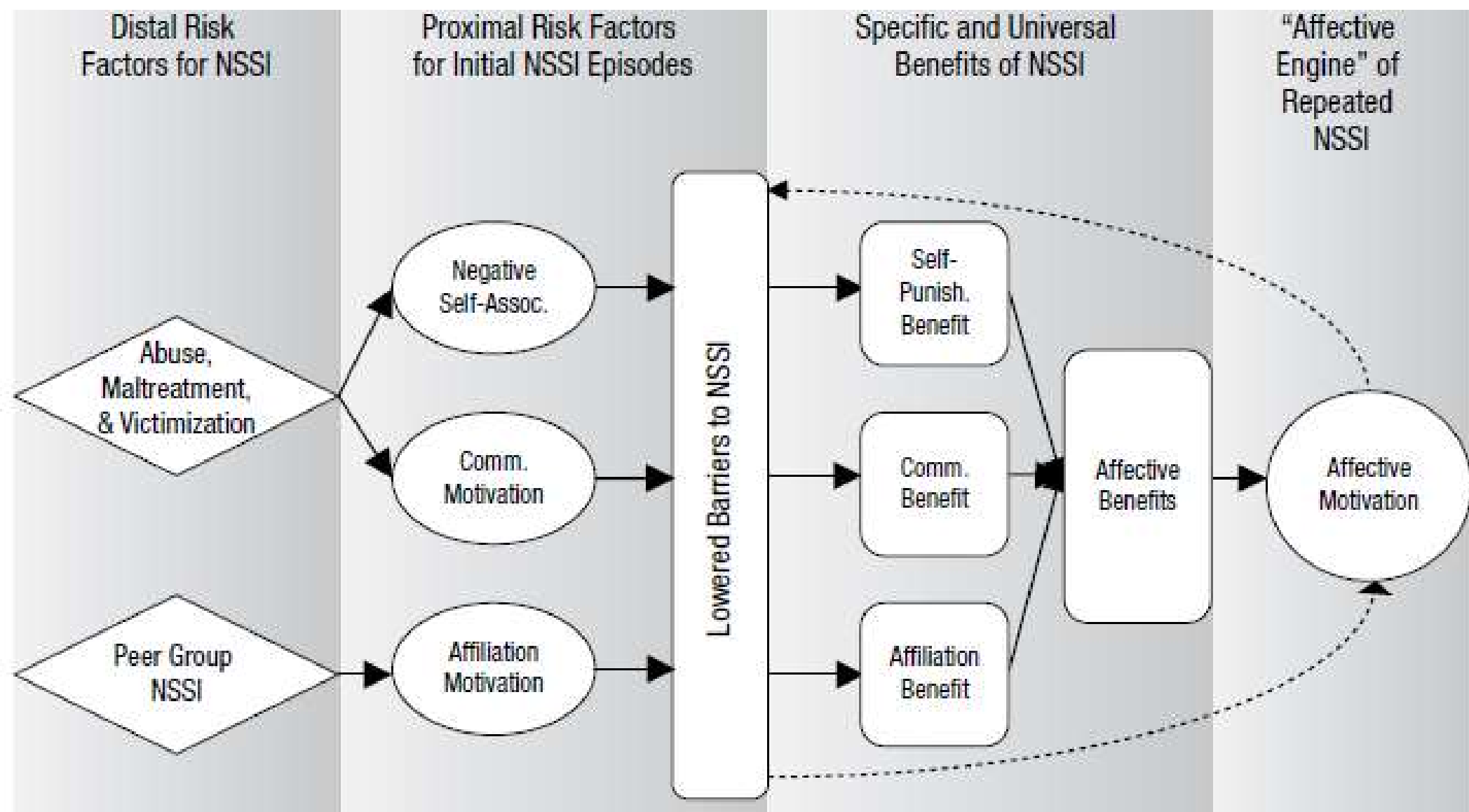
Barriers/Benefits Model

(Similar to Joiner's Interpersonal Theory of Suicide)

| BENEFITS | Barriers |
|-----------------------------------|----------------------------|
| Improve affect | Lack of Awareness |
| Gratifies Self-punishment desires | Positive View of Self |
| Peer Group Affiliation | Avoidance of Physical pain |
| Communicate Distress or Strength | Aversion to NSSI Stimuli |
| | Social Norms |

JOINER'S THEORY OF SUICIDE





(Hooley & Franklin, 2018)

Assessment



Somatic Assessment
First



Safety/Suicidality



Other Psychiatric
Issues

Assessment

- (1) Suicidal ideation before, during, or after NSSI
- (2) Types of NSSI engaged in
- (3) Onset of NSSI
- (4) Place/location of NSSI on the body
- (5) Severity and extent of damage because of NSSI
- (6) Functions served for adolescent by NSSI
- (7) Intensity/frequency of NSSI
- (8) Repetition of NSSI
- (9) Episodic frequency of NSSI in a typical day or Week

(Pluhar, Lois, & Thomaseo, 2018)

NSSI & Suicidality

- Among clinical samples, 14-70% of adolescents report both NSSI and Attempted Suicide
- Actual numbers are unclear, but risk factors are the same for each



How to discuss this?



Table 2. Recommendations for primary care pediatricians assessing nonsuicidal self-injury in adolescents

| Do | Do not |
|--|--|
| Discuss NSSI with patient in a calm and caring way. | Be overly reactive |
| Be nonjudgmental; validate the patient, although you may not agree with the behavior | Respond with panic, revulsion, shock, or averted gaze |
| Let the patient know there are people who care | Show excessive interest in the self-injurious behavior |
| Understand that this is a way of coping with the pain he/she feels inside | Try to stop the behavior with threats or ultimatums |
| Use the patient's language for NSSI | Permit the patient to relive the experiences of NSSI in detail |
| Be willing to listen | Promise to not tell anyone about the NSSI |

(Pluhar, Lois, & Thomaseo, 2018)

Treatment?

Treatment pathway

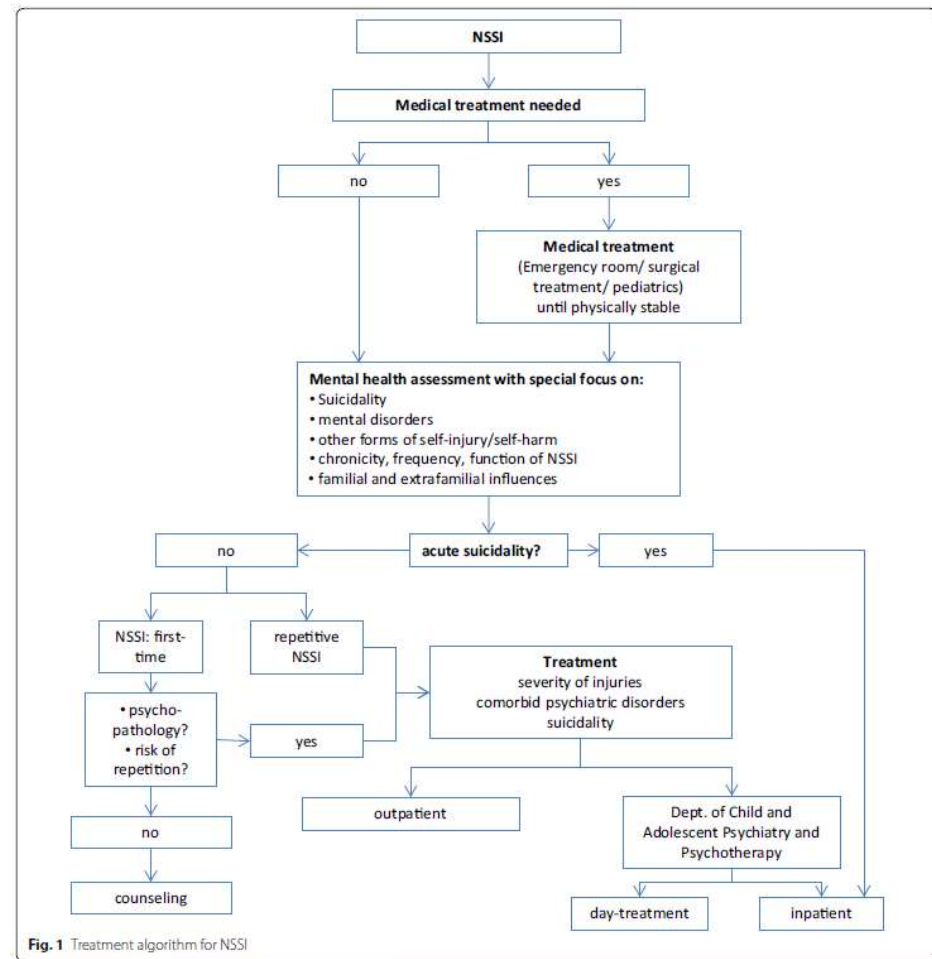


Fig. 1 Treatment algorithm for NSSI

(Plener, et al., 2016)

Psychotherapy

- Very Few RCTs evaluating just NSSI
- DBT has best data
- Emotion Regulation Group Therapy has several RCTs with good evidence
- Other forms of psychotherapy may be efficacious but haven't necessarily had NSSI studied



Table
Selected clinical trials evaluating treatments for adolescents with NSSI

| Reference | Population | N | Study design | Intervention | Results |
|----------------------------------|--|-----|------------------|--|---|
| Psychotherapy approaches | | | | | |
| CBT | | | | | |
| Brent et al. ³ | Depressed adolescents aged 12-18 yrs with non-response to SSRIs | 334 | RCT | SSRI < SSRI + CBT; venlafaxine, venlafaxine + CBT (12 wks) | No significant difference between groups in incidence of NSSI during the study |
| Goodyear et al. ⁴ | Depressed adolescents aged 12-18 yrs with nonresponse to brief psychosocial intervention | 208 | RCT | SSRI vs CBT + SSRI | Decreased frequency by more than 50% (no significant difference between groups) |
| DBT | | | | | |
| Goldstein et al. ⁶ | Adolescents aged 14-18 years with bipolar disorder | 10 | Open-label trial | DBT with individual and family skills training; 24 wks followed by continuation (tapering frequency to 1 yr) | 4 adolescents reported NSSI history at intake; no adolescents reported NSSI at final assessment |
| Mehlum et al. ^{8,9} | Adolescents aged 12-18 yrs with self-harm behavior | 77 | RCT | DBT-A (shortened form) vs EUC (19 wks) | Greater decrease in NSSI frequency in DBT-A group vs EUC; DBT-A group remained superior to EUC in decreased incidence of NSSI at 1 yr |
| McCauley et al. ⁹ | Adolescents aged 13-18 yrs with a history of suicide attempt | 173 | RCT | DBT vs IGST (6 mos) | 50% in DBT group vs 40% in ISGT group; no NSSI at 6 mos |
| Pistorello et al. ¹⁰ | College students aged 18-25 yrs with baseline suicidal thoughts, history of ≥ 1 NSSI episode or suicide attempt and ≥ 3 BPD criteria | 63 | RCT | DBT vs OTAU (7-12 mos) | Similar incidence of NSSI during the trial; mean NSSI count was lower for DBT than for OTAU |
| MBT | | | | | |
| Rossouw and Fonagy ¹¹ | Adolescents aged 14-17 years with depression and self-harm | 80 | RCT | MBT-A vs TAU | 56% of adolescents in MBT-A were self-harming at 12 mos vs 86% in TAU group |

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Psychotherapeutic Interventions



Table 2. Summary of Treatments and Interventions

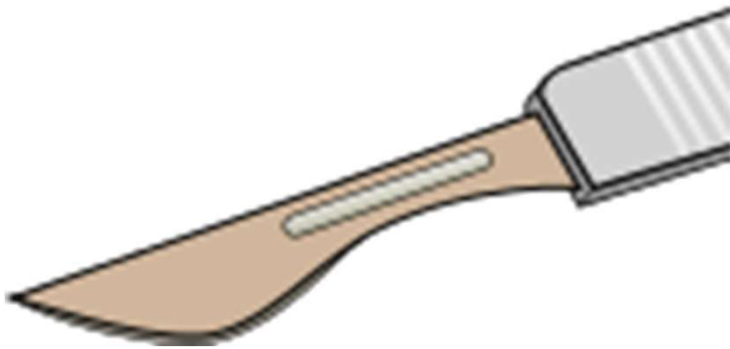
| Treatments/Interventions | Results |
|------------------------------------|---|
| Dialectical behavioral therapy | Comparable to TAU |
| Developmental group therapy | Comparable to TAU |
| Cognitive-behavioral therapy | Comparable to TAU |
| Psychosocial assessment in the ED | Reduced incidence of future self-harm |
| Therapeutic assessment | Improved rate of return for follow-up care |
| "Meaning Making" | Clients subjectively found it helpful |
| Continuity of care | Clients subjectively found it helpful |
| Encouraging secondary education | Case studies suggested it may be helpful |
| Harm reduction (patient education) | Single-case study suggested it may be helpful |
| Psychotropic medications | Clients subjectively found it harmful |
| Relaxation training | Clients subjectively found it harmful |
| High unit expectations | Clients subjectively found it harmful |
| Excess attention following NSSI | Clients subjectively found it harmful |

(Gonzales & Bergstrom, 2013)

Pharmacotherapy

- Discontinuation of meds lowering impulse control (benzodiazepines)
- SSRIs/SNRIs similar studies
- Naltrexone
- Buprenorphine?
- Aripiprazole has 1 RCT
- Ziprasidone has non-RCT efficacy (Turner, Austin, & Chapman, 2014)
- N-Acetylcysteine (Cullen, et al., 2018)
- **Treat comorbidities as appropriate**

Harm Reduction?



- Pragmatic Acknowledgment without moral condoning
- “Cutting the Risk” Self-Injury Workbook first posted online in 2002
- Differences between giving clean razors and staying with someone regardless of self-injury
- E-Communities and forums
- Issues with liability, legal concerns, & ethics. Could we inadvertently teach someone how to kill themselves?

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Questions?

