Trauma-Informed Inpatient Care: Utilizing Trauma-Focused, Evidence-Based Interventions to Treat Traumatized Adolescents in Inpatient Settings

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Using TF-CBT to Treat Traumatized Youth in Intensive Inpatient Treatment Settings

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Commercial Disclosure

I, Brian Denietolis, have no commercial relationships to disclose.
Learning Objectives

- To review prevalence rates of childhood trauma exposure in youth in inpatient psychiatric care
- To review psychiatric and behavioral consequences of trauma exposure in childhood
- To discuss special applications of Trauma-Focused CBT when used in longer term inpatient care.
Trauma Exposure Rates of Youth in Inpatient Psychiatric Care

- Research suggests that rates of trauma exposure among youth in inpatient psychiatric care is greater than 90% (Lipschitz, et al. 1999; Allwood, et al., 2008; Havens, et al., 2012;)

- More recent research found that 92% of traumatized youth in out of home care reported experiencing more than one traumatic event (Briggs et al., 2012)
Adolescents diagnosed with PTSD had higher rates of comorbid major depressive disorder, behavioral challenges, more suicidal ideation and behavior, and utilized more inpatient hospital services than their non-PTSD counterparts (Allwood et al., 2008; Havens et al. 2012)

Adolescents with probable PTSD had greater clinical severity and service utilization, an increased likelihood of being diagnosed with bipolar disorder, and being prescribed antipsychotic medications, and were prescribed more psychotropic medications
Inpatient youth diagnosed with PTSD present with high levels of diagnostic comorbidity and clinical severity:

- They are more likely to have higher levels of anxiety and depression
- High degrees of comorbidity with other mental health disorders
- Engage in high risk, self-harm, delinquent behaviors
- Evidenced poorer functioning relative to youth without PTSD
- Adolescents with PTSD in psychiatric inpatient settings have more suicidal ideation, more prior psychiatric hospitalizations, and longer hospitalizations (Havens, et al.; Allwood, et al.; Lipschitz et al.).
Developmental Sequelae of Trauma Exposure in Inpatient Youth

- Advances in neuroscientific research have identified structural and functional changes in the developing brain following exposure to significant trauma (Dvir, Ford, Hill, & Frazier, 2014; Muskett, 2013).

- Exposure to significant traumatic experiences suppresses neural pathway development and integration, particularly in the cerebral cortex, orbitoprefrontal cortex, hippocampul volume, and limbic system (Dvir, et al., 2014)

- These traumatic experiences and subsequent neurostructural changes likely result in impairments in mood and behavior regulation, leading to developmental challenges including difficulties with interpersonal effectiveness, emotion regulation, cognitive development, and behavioral inhibition (Dvir, et al., 2014; van der Kolk, 2005; van der Kolk, 2015)
Developmental Sequelae of Trauma Exposure in Inpatient Youth

- ACE study established an irrefutable link between childhood exposure to harsh experiences and adverse health outcomes (Fellitti, Anda, Nordenberg, Williamson, Spitz, Edwards, Koss, & Marks, 1998)
  - Graded positive relationship between childhood trauma and physical health challenges, including cardiovascular disease, diabetes, obesity, unplanned pregnancy, and STDs

- However, growing body of literature suggests that exposure to trauma can be counteracted by the presence of resilience-enhancing factors in the child’s immediate environment (Masten, 2018), including:
  - Access to evidence-based treatment for trauma
  - Low levels of family discord
  - Active engagement and support of nurturing caregivers
  - Academic and/or extra-curricular involvement
  - Absence of mental illness and/or substance abuse of those residing in the home
Psychotherapy for PTSD in Children and Adolescents

- Current scientific evidence suggests that cognitive-behavioral therapy with parental involvement (i.e., TF-CBT) and group CBT (i.e., CBITS) remain well established evidence-based practices for PTSD in adolescents (Dorsey et al., 2017).
Trauma-Focused CBT

- TF-CBT is a ‘components based’ psychosocial treatment model that integrates elements of CBT with attachment theory, client-centered psychotherapy, and family therapy interventions.
- Research evaluating the effectiveness of TF-CBT has shown it to be more effective at reducing symptoms of PTSD, disruptive behaviors, anxiety, and depression than:
  - Treatment as usual
  - Client-centered psychotherapy
  - No treatment
  - Other trauma-focused treatments (i.e., EMDR)
Unique TF-CBT Applications in Longer-term Inpatient Treatment Facilities  (Cohen, Mannarino, Navaro, 2012)

- Specifically focusing on stabilization of acute symptoms, bolstering motivation and enhancing safety **first**
- Modifying the order of TF-CBT components
- Enhancing direct care staffs’ understanding of trauma-informed care
- Strengthening parent engagement and participation
When to Begin TF-CBT in Longer-term Inpatient Care

- Assessment indicates that trauma is relevant to treatment

- Stabilization of acute safety concerns has occurred
  - Suicidality
  - Self-injury
  - Aggression to others
Direct Care Staff

- Program staff must have fully integrated trauma-informed care principles:
  - **Realize** the significant impact of trauma and understand how their relationship with youth cultivates healing and recovery
  - **Recognize** the signs and symptoms of trauma in youth they serve
  - **Respond** by fully integrating knowledge about trauma into their de-escalation and co-regulation strategies
  - **Resist re-traumatization** through by reducing coercive practices that contribute to stressful, toxic environments that interfere with recovery
Trauma-Focused CBT Modules

- Specific components of TF-CBT are summarized by the acronym PRACTICE
- P: Psychoeducation and Parental Guidance
- R: Relaxation and Stress Management
- A: Affect Recognition and Modulation
- C: Cognitive Coping and Reprocessing I
- T: Trauma Narrative
- I: In-vivo Mastery
- C: Cognitive Coping II (Cognitive Restructuring) and Conjoint Parent-Child Sessions
- E: Enhancing Future Safety
Modifications: Order of Components  
(Cohen, Mannarino, Navaro, 2012)

- R elaxation
- Affective expression and modulation
- P sychoeducation and parenting skills
- Cognitiv e coping and processing
- T rauma narrative and processing
- I n vivo mastery
- C onjoint child-parent sessions
- E nhancing future safety and development
Case Example: Sarah

- Sarah is an 18 year old female with a history of repeated sexual assault including forced sexual touching by a peer, rape, and coercion to send nude erotic pictures.
- She also presents with pronounced symptoms of major depressive disorder, recurrent self-harming behaviors, multiple suicide attempts, social anxiety, and significantly elevated symptoms of PTSD.
Case Example: Sarah

- Acute stabilization (SI and SIB) and Motivational Enhancement
  - Non-Suicidal Self-injurious Behavior
    - Safety Planning
    - Anti-rumination activities
    - Daily Diary Cards facilitated by staff and clinicians
    - Staff Facilitated Feeling Monitoring
    - Seeking Safety Group (Lisa Najavitz)
  - Motivational Enhancement Interventions
Case Example: Sarah

- Course of TF-CBT with this youth:
  - Stress Reduction and Relaxation Training
    - Use of Mindfulness Meditation
    - Use of Physical and Mental Grounding
  - Affect Recognition and Modulation
  - Psychoeducation and Parental Guidance
  - Cognitive Coping 1
  - Trauma Narrative
  - Cognitive Coping II
  - Enhancing Future Safety
Case Example: Reduction in PTSS

![UCLA PTSD Score Chart]

- PTSD at Admission: 43
- PTSD at Discharge: 24
Case Example: Child Behavior Checklist Results


References


References


IMPLEMENTATION OF DIALECTICAL BEHAVIOR THERAPY (DBT) FOR HOSPITALIZED ADOLESCENTS WITH TRAUMA

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Commercial Disclosure

I, Ingrid Sarmiento, have no commercial relationships to disclose.
OVERVIEW

- Present a brief description of DBT and research studies that demonstrates its effectiveness

- Discuss how DBT is an effective treatment for adolescents with trauma

- Present a DBT informed treatment model that was implemented on a young adult inpatient unit

- Discuss challenges and future directions of DBT focused impatient programs for adolescents
DIALECTICAL BEHAVIOR THERAPY (DBT)

- Developed by Marsha Linehan, PhD in the early 1990’s\(^1\)
- DBT is a theoretically grounded and empirically supported treatment originally developed for chronically suicidal patients and for people who experience borderline personality disorder
- It consists of four different domains that include:
  - Emotion Regulation
  - Distress Tolerance
  - Interpersonal Effectiveness
  - Mindfulness
DIALECTICAL BEHAVIOR THERAPY (DBT)

• DBT has demonstrated efficacy across various disorders that include:

   - Depression²
   - Eating Disorders³
   - Substance Abuse⁴
   - Anxiety⁵
   - PTSD⁶,⁷,⁸,⁹
DBT AS AN EFFECTIVE TREATMENT FOR ADOLESCENTS

- Community based pilot study conducted in the UK of (N=16) outpatient adolescent females
  - Marked reduction in self reported symptoms of depression, hopelessness, and deliberate self-harm and exhibited a general increase general functioning

- Outpatient group of suicidal adolescents (N=29), indicated significant reductions in SI, general psychiatric symptoms and symptoms related to BPD

- Pilot study of the implementation of DBT in an inpatient adolescent unit found a decreased in behavioral incidents during overall hospitalization
ADOLESCENT MENTAL HEALTH: AN ONGOING CONCERN

Increasing Rates of Trauma among Youth:
- More than 90% of youth needing hospitalization report histories of trauma

Increasing Rates of Suicide among Youth:
- In 2017 47% more suicides among people ages 15-19 than in 2000

Increasing Rates of Inpatient Hospitalizations among Youth:
- Approximately 120% from 1986 to 1997
OVERLAP IN SYMPTOMATOLOGY

* Suicidality
* NSSI
* Emotion Dysregulation
* Interpersonal problems
* Impulsive behaviors

BPD

PTSD
DEVELOPMENT OF A DBT-INFORMED TREATMENT MODEL

- TaraVista Behavioral Health: Start up inpatient hospital

- 24 patient bed unit for young adults (ages 16-24)

- Average LOS = 10 days

- Heterogeneous patient population

- Highly structured environment that consists of at least 6 therapy groups per day
## DBT FOCUSED GROUPS

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>DBT SKILL</th>
</tr>
</thead>
</table>
| Distress Tolerance            | • Distraction Skills  
                               | • Self Soothing  
                               | • Improve the Moment  
                               | • Radical Acceptance                                                          |
| Emotion Regulation            | • PLEASE  
                               | • Letting Go of Emotional Suffering  
                               | • Accumulating Positive Emotions                                               |
| Interpersonal Effectiveness   | • DEAR MAN  
                               | • GIVE  
                               | • FAST                                                                                 |
| Mindfulness                   | • WISE Mind  
                               | • Observe, What, How Skills                                                      |

### Additional Weekly Groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse Control</td>
<td>Chain Analysis</td>
</tr>
<tr>
<td>Self Assessment/Diary Card</td>
<td>Coping and Crisis Planning</td>
</tr>
</tbody>
</table>
DBT FOCUSED GROUPS

- No trauma processing
- Reminders of confidentiality
- Allowing patients to engage in self soothing skills during groups (model magic, coloring)
- Making written and spoken material relatable to adolescents
- Utilizing worksheets that are age appropriate
GOALS OF DBT TREATMENT

• To maintain safety (SI and NSSI)
• To mitigate fear of trauma-associated emotions
• To identify and learn to manage triggers
• To develop insight around behaviors
• To begin to radically accept trauma
• To create purpose and meaning and ......live a life worth living
TAILORING DBT TO ADOLESCENTS WITH TRAUMA

Important Factors to Consider:

• DBT as a universal language across all disciplines
• Clinically trained staff to assess/differentiate symptoms of PTSD
• Importance of TIC
  ✓ Establishing trust
  ✓ Ensuring safety
  ✓ Avoiding re-victimization
CHALLENGES TO CONSIDER

• Heterogeneity of adolescents on the unit

• Short length of stays

• Enhancing direct care staffs’ understanding of trauma-informed care

• Strengthening parent engagement and participation
NEXT STEPS IN TREATMENT

• “Planting seeds” – 77% of adolescents suicide attempters do not continue outpatient treatment\(^2\)

• Family engagement
  - Family meeting when clinically indicated
  - Teaching parents skills
  - Providing resources

• Providing appropriate and realistic referrals for:
  - IOP/Partial/Residential Program
  - DBT outpatient groups
  - DBT therapists
FUTURE DIRECTIONS

• Ongoing clinical and systemic training regarding TIC
• Larger RCT trials of DBT-PTSD needed that focus on more inclusive populations and adolescents
• Collaborate with managed care companies to educate them regarding the benefits of DBT
REFERENCES

1) Linehan MM (1993), Cognitive Behavioral Treatment for Borderline Personality Disorder, New York: Guilford


REFERENCES


Thank you!
Implementing Mindfulness-Based Cognitive Therapy for Children (MBCT-C) in Inpatient Psychiatric Settings: A Pilot Study

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I, Zlatina Kostova, have no commercial relationships to disclose.
“When we were doing the stretching exercise with the neck, I had flashbacks of the guy who raped me and who was trying to choke me and threaten to kill me. [...] When we were doing the breathing exercise, focusing on the belly, it reminded me of my miscarriage and I started to shake and feel anxious and I had to leave.”

16 year old female
- Hospitalized due to attempted suicide
- PTSD, MDD, GAD, Panic disorder
- History of complex trauma, including rape
Agenda

- Mindfulness-Based Cognitive Therapy
- Pilot study
- Lessons learned
What is Mindfulness?

Paying attention in a particular way: on purpose, in the present moment and non judgmentally.

The power of Mindfulness is giving us a way to be in wise relationship with our inner and outer experience and find a way to be at home in your own skin.

It is about embodying integrity, wakefulness and heartfulness. It is a way of being. It is dropping in your own essential nature, which is already whole and beautiful.
Why Mindfulness in inpatient settings?

- Inpatient youth with PTSD present with much more complex clinical picture\(^1,5\)
- High comorbidity (e.g. Major Depressive Disorder)\(^2,3\)
- Higher risk of suicide and self-harm\(^4\)
- Multiple psychotropic medications (88% vs 66%)\(^3\)
- Service utilization: 72% of adolescents with PTSD had experienced prior psychiatric hospitalization compared to 43.5% without PTSD\(^2\)
- Longer hospitalization stays: PTSD adolescents averaged 18.78 hospital days vs 12.46 non PTSD adolescents\(^2\)
Therefore

• Pressing need to identify additional psychological treatments with greater effectiveness and complementary mechanisms of action\textsuperscript{6}
  ➢ Short term
  ➢ Group format
  ➢ Geared towards skills training and stabilization
  ➢ Sensitive to both trauma histories and comorbid disorders
  ➢ Treatments that can \textbf{prevent relapse and re-hospitalization}
Why MBCT/MBCT-C?

History of mood disorders → Sensitivity to mood changes → Re-activation of negative pattern of thinking → Onset of new depressive and suicidal episodes
LOOKING BEHIND THE WATERFALL

CONTEXT: what happened recently?

Trigger/situation → FEELINGS

FEELINGS → THOUGHTS

THOUGHTS → Impulses to act

Impulses to act → Body sensations

Body sensations → CONTEXT: what happened recently?
Creating a space

Becoming aware of thoughts, body sensations and feelings

Different way to relate to experience

Being able to choose the most skillful response
Goals of the study

- Assess feasibility and efficacy of MBCT-C among inpatient youth
- Design a trauma-sensitive curriculum considering trauma history and high acuity
- Adapt Mindfulness to inpatient settings
TaraVista Behavioral Health Center

• Services
  ➢ 12 Bed Care Access Unit
  ➢ Adult psychiatry and co-occurring disorders units (2)
  ➢ Young Adults Unit ages 16-24
  ➢ Child unit ages 5-15
  ➢ LGBTQ (coming soon)

• Mission
  ➢ Tara: goddess of those suffering and experiencing misery
  ➢ Combination of evidence-based treatment with therapies supplemented by innovation
Study design

Recruitment

- Exclusion criteria:
  - Unable to consent
  - Acute psychosis
  - Intoxicated
  - Cognitive deficit
  - Oppositional, hostile

Pre-treatment assessment

- PTSD Checklist (PCL)
- Center for Epidemiologic Studies Depression Scale (CES-D)
- State-Trait Anxiety Inventory (STAI)
- Mindful Attention Awareness Scale (MAAS)

Treatment stage: 3 weekly sessions of MBCT-C

Post-treatment assessment

- 10 Semi-structured interviews
Sample

- Total of **90 youth** (45 in this analysis)
- Mean age: 20.16 (37.8% between 16-18; 55.5% between 18-24)
- Gender: 37.8% male; 53.3% female; 6.7% transgender; 2.2% non-binary
- Race: 82.2% Caucasians; 8.9% Latino; 6.7% black; 2.2% Asian/American
- Residence: 60% live at home with parents
- Education: 53.3% HS diploma or GED; 15.6% college
- Medium length of hospitalization: 10.9 days
- Mean number of attended groups: **2.1**
- Trauma: 61.4% yes; 25% no; 13.6% unknown
- Numbers of trauma: **1.4**
Results
Baseline scores on PTSD

68% above clinical cut-off of 31-33
Improvements in outcomes

- Mindfulness (0-75)
- State anxiety (20-80)
- Trait anxiety (20-80)
- Depression (0-60)
- PTSD (0-80)

Mean change in scale score

Outcome measure
Improvements in Mindfulness by diagnosis

![Bar chart showing mean change in Mindfulness scale score by diagnosis.](chart.png)
Effects of number of groups attended

![Graph showing the coefficient for the number of groups attended on various outcome measures including Mindfulness, Anxiety-state, Anxiety-trait, Depression, and PTSD. The graph indicates varying levels of effect sizes for each outcome measure.]
Factors to consider

- Inpatient settings
- Acuity and trauma history of patients
- Developmental stage
Inpatient settings

Goals
- Safety
- Stabilization
- Skills

- No “working with difficulty” meditations
- Mindfulness as emotion regulation skill
- Can’t implement full protocol
- Each session as a full intervention
- Dealing with crisis and unpredictability
Acuity of patients

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>“Focusing on the breath made me even more anxious.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>“I can’t stay still for more than 5 minutes.”</td>
</tr>
<tr>
<td>PTSD</td>
<td>“I have to know what’s going on around me, I have to see it, I have to see who is walking in the room. I feel uncomfortable closing my eyes, because what if you are lying here and something is floating against you?” [F, 21 yo]</td>
</tr>
<tr>
<td>OCD</td>
<td>“When we did the breathing exercise, it made me feel the withdrawing symptoms of smoking even more.”</td>
</tr>
<tr>
<td>Addiction</td>
<td></td>
</tr>
</tbody>
</table>
When?

“It helps me realize what is my true emotion. I tend to think of my emotions in extreme and if I am more aware and mindful of my body, then I can know that I am not angry, but just annoyed.” [F, 18 yo]

“7 is the highest I can be helped in with Mindfulness. It helps awareness at the initial stages, but not when I am at 10. Then I need to do something more physical.” [F, 21 yo]
<table>
<thead>
<tr>
<th>Options</th>
<th>Predictability</th>
<th>Sensory-motor</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes closed or open</td>
<td>Explain in advance</td>
<td>Stretching</td>
<td>Buy in</td>
</tr>
<tr>
<td>Sitting or laying</td>
<td>No surprises</td>
<td>Taste</td>
<td>Incorporate cognitive therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music</td>
<td>elements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walking</td>
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</table>
Conclusions

- Mindfulness is a feasible intervention in inpatient psychiatric settings
- There are controversies about using mindfulness with PTSD, but our results suggest the opposite
- PTSD symptoms improved the most
- PTSD and substance abuse people improved the most their mindfulness skills
- Higher dosage correlated with trait anxiety and mindfulness skills
Future directions

Adapt mindfulness to: settings, level of acuity and development stage

Prognostic indicators for personalized medicine approach

People with PTSD and substance abuse benefit

Trait anxiety improves significantly

People with schizophrenia benefit less
References


THANK YOU!!

You can download this presentation at: https://www.umassmed.edu/sparc/

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