

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

Discussant: Carl Fulwiler, MD, PhD

Professor of Psychiatry and Medicine, University of Massachusetts Medical School Chief Medical Officer, TaraVista Behavioral Health Center

Presenters:

Brian Denietolis, PsyD^{1,3} Ingrid Sarmiento, PhD² Zlatina Kostova, PhD¹

- 1. University of Massachusetts Medical School
 - 2. TaraVista Behavioral Health Center
 - 3. Worcester Recovery Center and Hospital











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

International Society for Traumatic Stress Studies 35th Annual Meeting Boston, MA

Brian M. Denietolis, Psy.D.

Interim Program Director and Clinical Director
UMass Adolescent Continuing Care Inpatient Program
Assistant Professor of Psychiatry and Pediatrics
University of Massachusetts Medical School



Trauma, Recovery, and Resilience: Charting a Course Forward

November 14-16, 2019 • Pre-Meeting Institutes, November 13
Boston Marriott Copley Place • Boston Massachusetts, USA

Continuing Medical Education 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

- O 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)

Trauma Exposure Rates of Youth in Inpatient Psychiatric Care

- 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

Trauma Exposure Rates of Youth in Inpatient Psychiatric Care

- 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
 - o 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

- O 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
- O 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 <u>first</u>
- 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 traumainformed 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 deescalation 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
- o 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

- Relaxation
- Affective expression and modulation
- Psychoeducation and parenting skills
- Cognitive coping and processing
- Trauma narrative and processing
- o In vivo mastery
- Conjoint child-parent sessions
- Enhancing 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

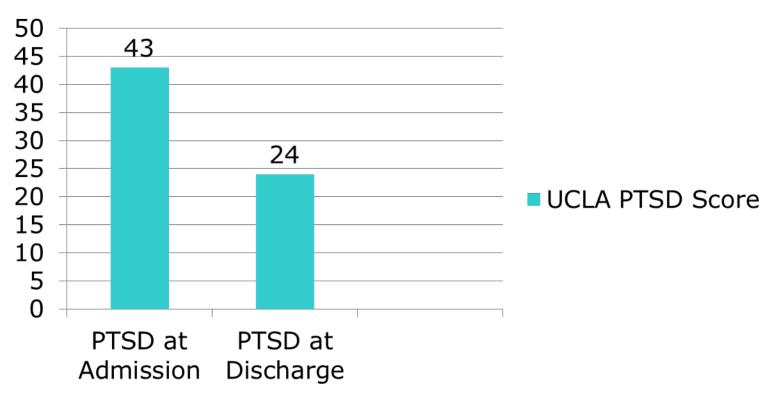
- Acute stabilization (SI and SIB) and Motivational Enhancement
 - Non-Suicidal Self-injurious Behavior
 - Safety Planning
 - Anti-rumination activities
 - Daily Diary Cards facilitated by staff and clinicians
 - Staff Facilitated Feeling Monitoring
 - Seeking Safety Group (Lisa Najavitz)
 - Motivational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

Case Example: Sarah

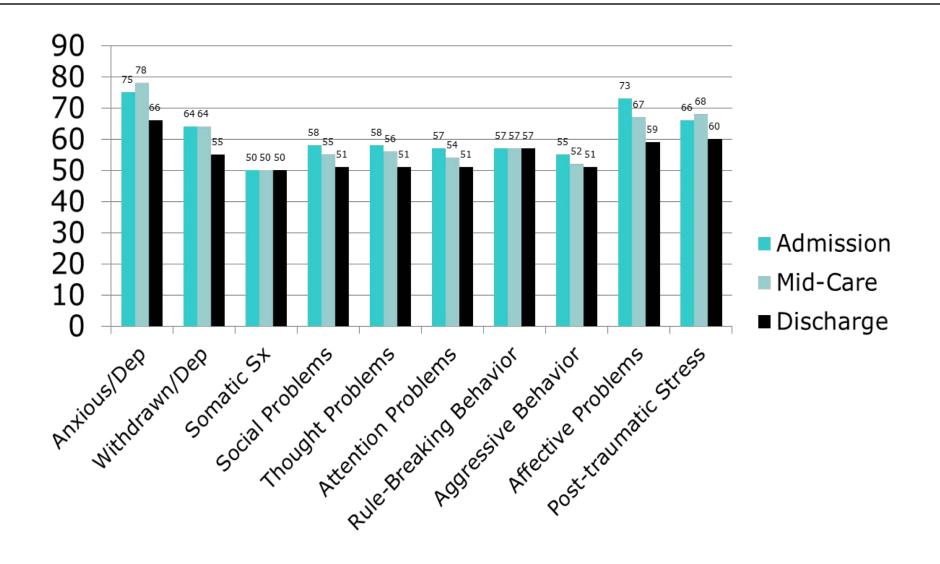
- Ocourse of TF-CBT with this youth:
 - Stress Reduction and Relaxation Training
 - Use of Mindfulness Meditation
 - Use of Physical and Mental Grounding
 - Affect Recognition and Modulation
 - Psychoeducation and Parental Guidance
 - Cognitive Coping 1
 - Trauma Narrative
 - Cognitive Coping II
 - Enhancing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

Case Example: Reduction in PTSS





Case Example: Child Behavior Checklist Results



Briggs, E. C., Greeson, J. K. P., Layne, C.M., Fairbank, J. A., Knoverek, A. M., & Pynoos, R. S. (2012). Trauma exposure, psychosocial functioning, and treatment needs of youth in residential care: preliminary findings from the NCTSN Core Data Set. Journal of Child and Adolescent Trauma, 5, 1–15.

Cloitre, M., Stolbach, B. C., Herman, J. L., Kolk, B. v. d., Pynoos, R., Wang, J., et al. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. [Article]. *Journal of Traumatic Stress*, 22(5), 399-408.

Cohen, J. A., Mannarino, A. P., & Navarro, D. (2012). Residential treatment. In J. A. Cohen, A. P. Mannarino, & E. Deblinger (Eds.), Trauma-Focused CBT for children and adolescents: Treatment applications (pp. 73-102). New York: The Guilford Press.

- Dvir Y, Ford JD, Hill M, Frazier JA. Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. Harv Rev Psychiatry. 2014; 22(3): 149-161.
- Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and ptsd symptom severity. Behavior Therapy, 41(4), 587-598. doi: 10.1016/j.beth.2010.04.004.
- Felliti, V, Anda, R., Nordenberg, D, Williamson, D, Spitz, A, Edwards, V, Koss, M, Marks, J (1998). Relationship of childhood abuse and household dysfunction to many of the leading cuases of death in adults; The Adverse Childhood Experiences Study. American Journal of Preventive Medicine, 14(4), 245-258.
- Herman, J. L. (1992b). Trauma and recovery. New York: Basic Books.
- Igarashi, H., Hasui, C., Uji, M., Shono, M., Nagata, T., & Kitamura, T. (2010). Effects of child abuse history on borderline personality traits, negative life events, and depression: A study among a university student population in Japan. Psychiatry Research, 180(2-3), 120-125. doi: 10.1016/j.psychres.2010.04.029.
- Jensen, T., Holt, T., Ormhaug, S., Egeland, K., et al., (2014). A randomized effectiveness study comparing trauma-focused cognitive behavioral therapy with therapy as usual for youth. Journal of Clinical Child and Adolescent Psychology, 43(3), 356-369.

- Lasiuk, G. C., & Hegadoren, K. M. (2006). Posttraumatic Stress Disorder Part I: Historical Development of the Concept. [Article]. Perspectives in Psychiatric Care, 42(1), 13-20. doi: 10.1111/j.1744-6163.2006.00045.x.
- Masten, A. (2018). Resilience theory and research on children and families:
 Past, Present, and Promise. Journal of Family Theory and Review, 10, 12-31.
- Mueller, S. C., Maheu, F. S., Dozier, M., Peloso, E., Mandell, D., Leibenluft, E., et al. (2010). Early-life stress is associated with impairment in cognitive control in adolescence: An fMRI study. Neuropsychologia, 48(10), 3037-3044. doi: 10.1016/j.neuropsychologia.2010.06.013.

- Silverman, W.K., Ortiz, C.D., Viswesvaran, C., Burns, B.J., Kolko, D.J., Putnam, F.W., & Amaya-Jackson, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. Journal of Clinical Child and Adolescent Psychology, 37(1), 156-183.
- Terr, (1991). Childhood traumas: an outline and overview. American Journal of Psychiatry, 148(1), 10-20.
- Van der Kolk, B. A. (2005). Developmental trauma disorder: toward a diagnosis for children with complex trauma histories. Psychiatric Annals, 35(5), 401-408.
- Van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. [Article]. *Journal of Traumatic Stress*, 18(5), 389-399.
- Warner, L. A., & Pottick, K.J. (2003). Nearly 66,000 youth live in U.S. mental health programs. Latest Findings in Children's Mental Health: Policy Report submitted to the Annie E. Casey Foundation, 2, 1–2.
- Zelechoski, A.D., Sharma, R., Beserra, K., Miguel, J.L., DeMarco, M., & Spinazzola, J. (2013). Traumatized youth in residential treatment settings: Prevalence, clinical presentation, treatment, and policy implications. *Journal of Family Violence*, 28, 639-652.

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

INGRID A. SARMIENTO, PHD

FORMER DIRECTOR OF PSYCHOLOGICAL SERVICES & OUTREACH
TARAVISTA BEHAVIORAL HEALTH CENTER

NOVEMBER 16, 2019



Trauma, Recovery, and Resilience: Charting a Course Forward

November 14-16, 2019 • Pre-Meeting Institutes, November 13Boston Marriott Copley Place • Boston Massachusetts, USA

Continuing Medical Education 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's¹
- 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

PTSD^{6,7,8,9}

DBT AS AN EFFECTIVE TREATMENT FOR ADOLESCENTS¹³

- 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 ¹⁴
- Outpatient group of suicidal adolescents (N=29), indicated significant reductions in SI, general psychiatric symptoms and symptoms related to BPD¹⁵
- Pilot study of the implementation of DBT in an inpatient adolescent unit found a decreased in behavioral incidents during overall hospitalization¹⁶

ADOLESCENT MENTAL HEALTH: AN ONGOING CONCERN

Increasing Rates of Trauma among Youth:

More than 90% of youth needing hospitalization report histories of trauma¹⁸

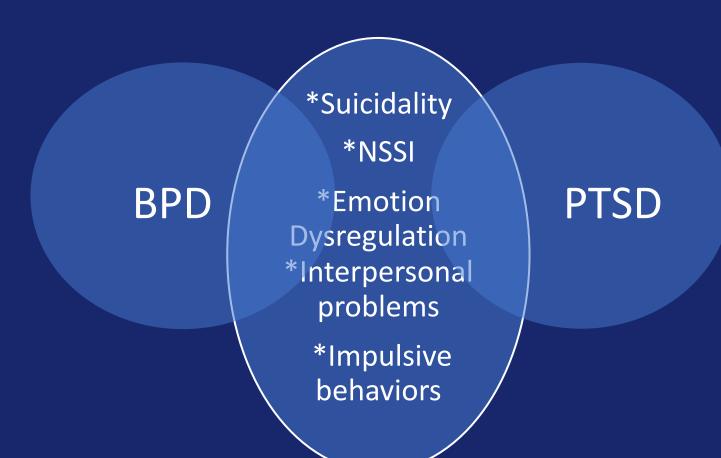
Increasing Rates of Suicide among Youth:

➤ In 2017 47% more suicides among people ages 15-19 than in 2000¹⁷

Increasing Rates of Inpatient Hospitalizations among Youth:

> Approximately 120% from 1986 to 1997¹⁹

OVERLAP IN SYMPTOMATOLOGY



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 20

DOMAIN	DBT SKILL
Distress Tolerance	 Distraction Skills Self Soothing Improve the Moment Radical Acceptance
Emotion Regulation	PLEASELetting Go of Emotional SufferingAccumulating Positive Emotions
Interpersonal Effectiveness	DEAR MANGIVEFAST
Mindfulness	WISE MindObserve, What, How Skills

Additional Weekly Groups:	
Impulse Control	Chain Analysis
Self Assessment/Diary Card	Coping and Crisis Planning

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 andlive a life worth living



TAILORING DBT TO ADOLÉSCENTS 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 treatment²¹
- 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: Guliford
- 2) Lynch, TR, Morse, J, Mendelson, T, Robins, C. (2003) Dialectical behavior therapy for depressed older adults: A randomized pilot study. American Journal of Geriatric Psychiatry. 11, 33-45.
- 3) Telch CF, Agras, WS, Linehan, MM (2001). Dialectical behavior therapy for binge eating disorder. Journal of Consulting in Clinical Psychology, 69:1061-1065
- 4) Dimeff, L, Rizvi, SL, Brown, M, & Linehan, MM. (2000). Dialectical behavior therapy for substance abuse: A pilot application to methamphetamine-dependent women with borderline personality disorder. Cognitive and Behavioral Practice, 7, 457-468.
- 5) Marra, T. (2004). Depressed and Anxious The Dialectical Behavior Therapy Workbook for Overcoming Depression and Anxiety, Oakland, CA. Harbinger Publications Inc.
- 6) Becker, CB, & Zayfert, C. (2001) Integrating DBT-based techniques and concepts to facilitate exposure treatment for PTSD. Cognitive and Behavioral Practice, 8, 107-122.
- 7) Swenson, C., Witterholt, S, Bohus, M (2007). Dialectical behavior therapy on inpatient units. In L. Dimeff & K. Koener (eds), Dialectical behavior therapy in clinical practice (pp 69-103), New York, NY: Guilford Press.
- 8) Wagner, AW, Linehan, M. (2006) Applications of dialectical behavior therapy to posttraumatic stress disorder and related problems. In M. Follette & J. I. Ruzek (Eds.). Cognitive Behavior Therapies for Trauma (pp 117-145). New York, NY: Guilford Press.
- 9) Wagner, A. W., Rizvi, SL, Hared MS. (2007) Applications of dialectical behavior therapy to the treatment of complex-trauma-related problems: When one-case formulation does not fit all. Journal of Traumatic Stress, 20, 391-400.
- 10) Steil, R, Dryer, A, Priebe, K, Kleindienst, N., & Bohus, M. (2011). Dialectical behavior therapy for posttraumatic stress disorder related to childhood sexual abuse: A pilot study of an intensive residential treatment program. Journal of Traumatic Stress, 24, 102-106.

REFERENCES

- 11) Gorg, N, Priebe, K, Bohnke, J, Steil, R, Dyer, A Kleindienst, N. (2017) Trauma related emotion and radical acceptance in dialectical behavior therapy for posttraumatic stress disorder after childhood sexual abuse. Borderline Personality Disorder and Emotion Regulation. 4(15).
- 12)Steil, R, Dittman, C, Muller-Engleman, M, Dyer, A, Maasch, AM, Priebe, K. Dialectical behavior therapy for posttraumatic stress disorder related to childhood sexual abuse: a pilot study in an outpatient treatment setting. European Journal of Psychotraumatolgy, 9.
- 13) Miller, AL, Rathus, JH, Linehan, MM, Wetzler, S. & Leigh, E. (1997). Dialectical behavior therapy adapted for suicidal adolescents. Journal of Practical Psychiatry and Behavior Health, 3, 78-86.
- 14) James, A, Taylor, A, Winmill L, Alfoadari, K. (2008). A Preliminary Community Study of Dialectical Behavior Therapy (DBT) with Adolescent Females Demonstrating Persistent, Deliberate Self-Harm (DSH). Child and Adolescent Mental Health, 13(3):148-152.
- 15) Rathus, JH, Miller AL (2002). Dialectical behavior therapy adapted for suicidal adolescents. Suicide Life Threat & Behavior, 32:146-157.
- 16) Katz, LY, Cox, BJGunasekana, S. Miller, AL. (2004). Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. Journal of American Academy for Child and Adolescent Psychiatry, 32, 276-282.
- 17) Miron, O, Yu, KH, Wilf-Miron, R. (2019). Suicide Rates Among Adolescents and Young Adults in the United States. 2000-2017. JAMA, 321 (23): 2362-2364.
- 18) Havens, J, Gudiño, Biggs, E, Diamond, U, Weis, JB, Cloitre, M (2012). Identification of Trauma Exposure and PTSD in Adolescent Psychiatric Inpatients: An Exploratory Study. Journal of Traumatic Stress, 25(2):171-178.
- 19) Case, B, Olfson, M, Marcus, S., Siegel, C. (2007) Trends in the inpatient mental health treatment of children and adolescents in US community hospital s between 1990-2000. Archives of General Psychiatry, 64, 89-96.
- 20) Rathus JH., Miller Al (2015). DBT Skills Manual for Adolescents . New York, NY Guilford Press.
- 21) Fleischhaker, C, Bohne, R, Sixt, B, Bruck, C, Schneider, C, Schultz, E. (2011), Dialectical. Behavior Therapy for Adolescents (DBT-A): A Clinical Trial for Patients with Suicidal and Self-Injurious Behavior and Borderline Symptoms with a One-year Follow Up. Child and Adolescent Psychiatry and Mental Health, 5:3.

Thank you!









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

Zlatina Kostova, PhD

Postdoctoral Associate in Clinical Psychology
Department of Psychiatry
University of Massachusetts Medical School



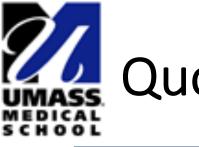


Trauma, Recovery, and Resilience: Charting a Course Forward

November 14-16, 2019 • Pre-Meeting Institutes, November 13
Boston Marriott Copley Place • Boston Massachusetts, USA

Continuing Medical Education Commercial Disclosure

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.



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.

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.



Why Mindfulness in inpatient settings?



High comorbidity (e.g. Major Depressive Disorder)^{2,3}

Higher risk of suicide and self-harm⁴

Multiple psychotropic medications (88% vs 66%)³

Service utilization: 72% of adolescents with PTSD had experienced prior psychiatric hospitalization compared to 43.5% without PTSD²

Longer hospitalization stays: PTSD adolescents averaged 18.78 hospital days vs 12.46 non PTSD adolescents²





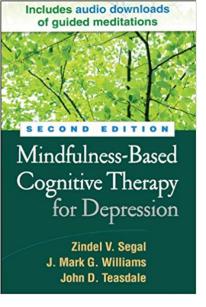


Therefore

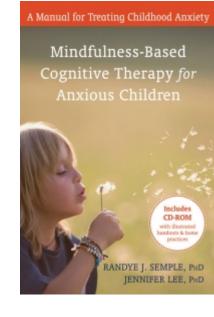


- Pressing need to identify additional psychological treatments with greater effectiveness and complementary mechanisms of action⁶
 - ➤ Short term
 - ➤ Group format
 - ➤ Geared towards skills training and stabilization
 - Sensitive to both trauma histories and comorbid disorders
 - Treatments that can 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





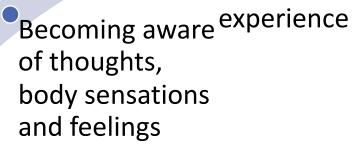
Creating a space



Being able to chose the most skillful response









Goals of the study



Assess feasibility and efficacy of MBCT-C among inpatient youth

Design a traumasensitive 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

Pre-treatment assessment

Treatment stage: 3 weekly sessions of MBCT-C

Post-treatment assessment

Exclusion criteria:

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

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

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

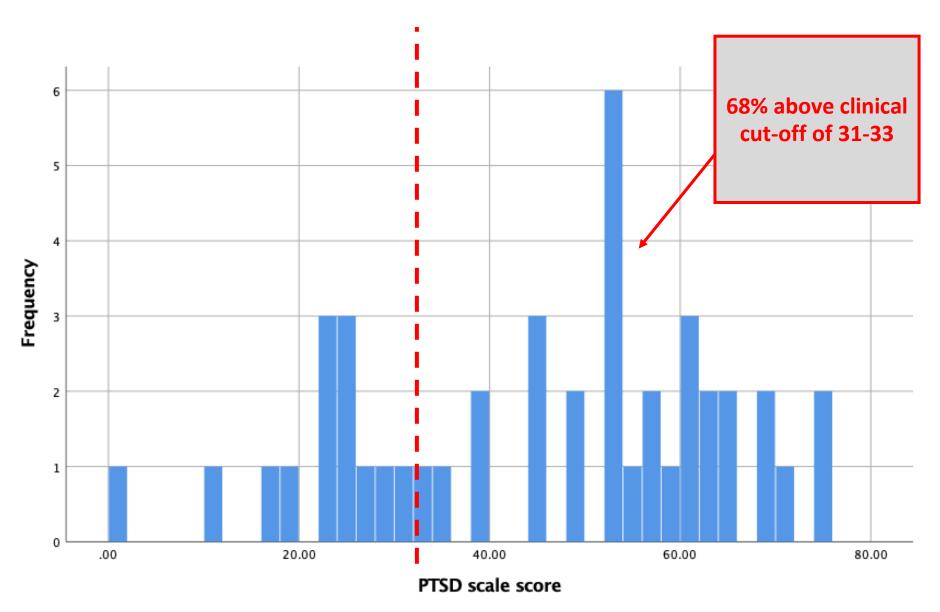


Results



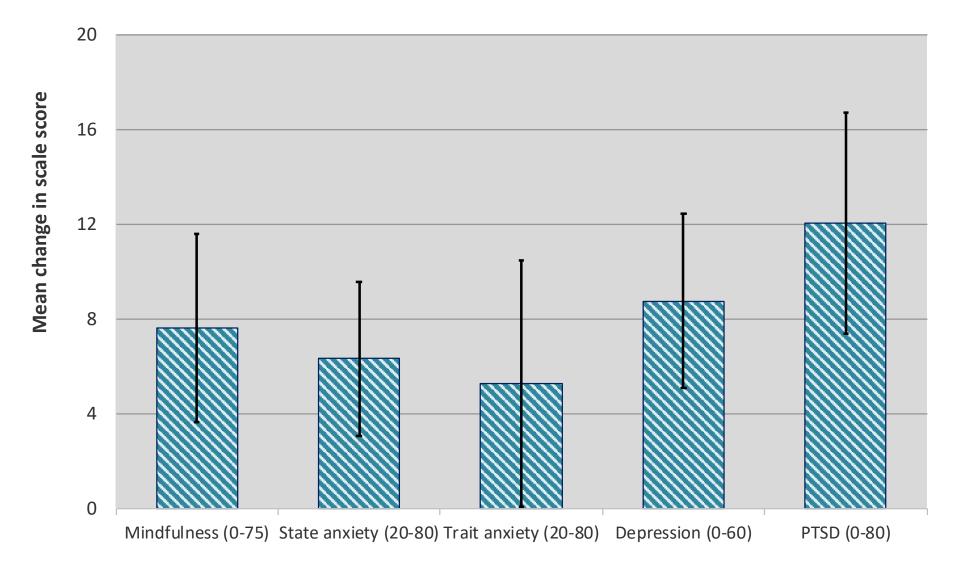


Baseline scores on PTSD



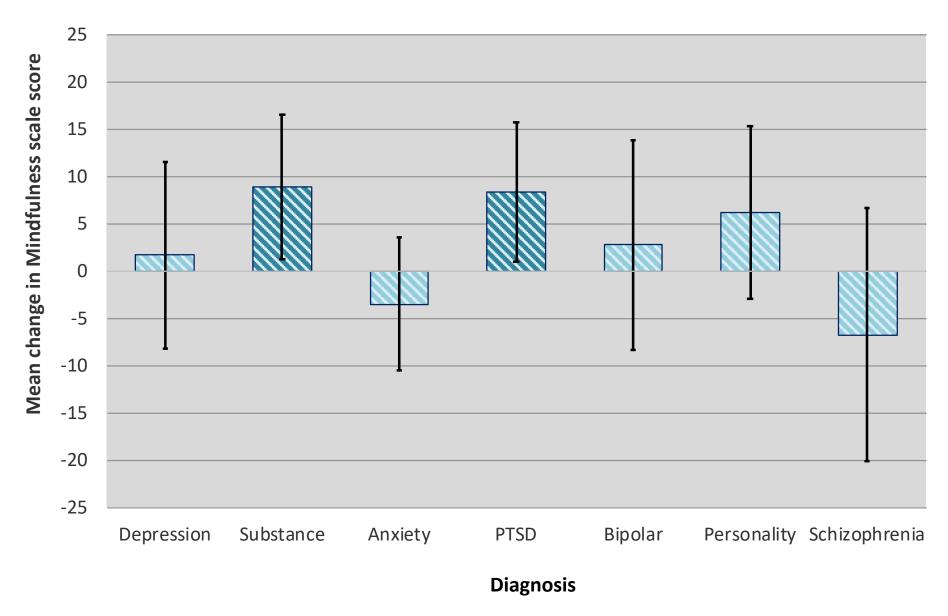


Improvements in outcomes



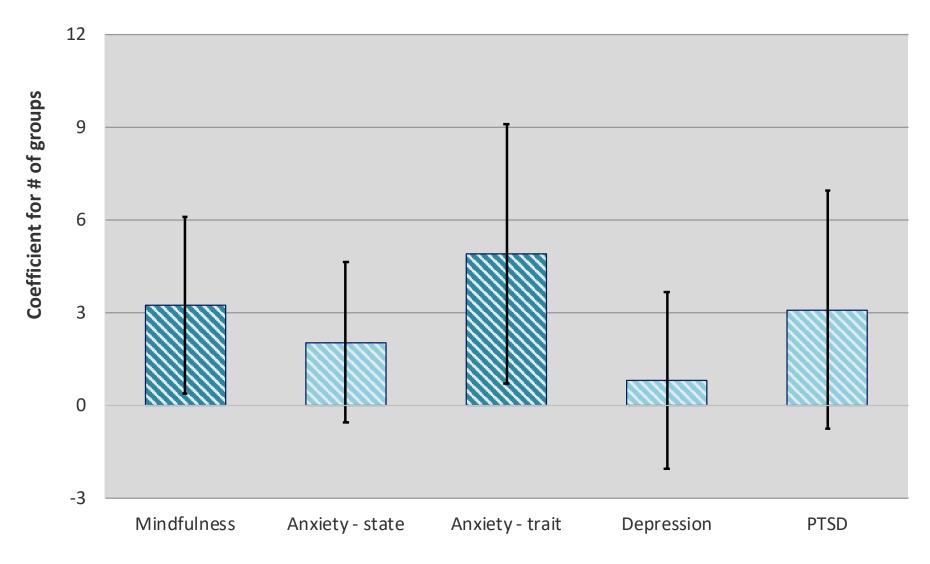


Improvements in Mindfulness by diagnosis





Effects of number of groups attended



Outcome measure



Factors to consider

Inpatient settings

Acuity and trauma history of patients

Developmental stage



Inpatient settings



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



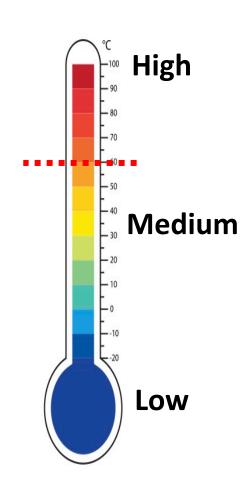
Acuity of patients

Anxiety "Focusing on the breath made me even more anxious." **ADHD** "I have to know what's going on around me, I have to see it, I have to see who is walking in **PTSD** the room. I feel uncomfortable closing my eyes, because what if you are lying here and the something is floating against you?" [F, 21 yo] **OCD** "When we did the breathing exercise, it made me feel the Addiction withdrawing symptoms of smoking even more."



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]



Tips





- Eyes closed or open
- Sitting or laying



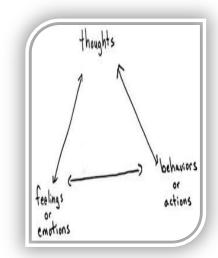
Predictability

- Explain in advance
- No surprises



Sensorymotor

- Stretching
- Taste
- Music
- Walking



Rationale

- Buy in
- Incorporate cognitive therapy elements



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

- 1. Havens, J., Gudino, O., Biggs, E., Diamond, U., Weis, R., and Cloitre, M. (2012). Identification of trauma exposure and PTSD in adolescent psychiatric inpatients: an exploratory study. *Journal of Traumatic Stress*, 25, 171-178.
- 2. Allwood, M. A., Dyl, J., Hunt, J. I., & Spirito, A. (2008). Comorbidity and service utilization among psychiatrically hospitalized adolescents with posttraumatic stress disorder. *Journal of Psychological Trauma*, 7(2), 104-121.
- 3. Mueser, K. T., & Taub, J. (2008). Trauma and PTSD among adolescents with severe emotional disorders involved in multiple service systems. *Psychiatric Services*, *59*(6), 627-634.
- 4. Wright, J., Friedrich, W., Cinq-Mars, C., Cyr, M., & McDuff, P. (2004). Self-destructive and delinquent behaviors of adolescent female victims of child sexual abuse: Rates and covariates in clinical and nonclinical samples. *Violence and Victims*, 19(6), 627.
- 5. Cohen, J. A., Mannarino, A. P., Jankowski, K., Rosenberg, S., Kodya, S., & Wolford, G. L. (2016). A randomized implementation study of trauma-focused cognitive behavioral therapy for adjudicated teens in residential treatment facilities. *Child maltreatment*, 21(2), 156-167.
- 6. Schwartz, L. J., & Friedman, H. A. (2009). College student suicide. *Journal of College Student Psychotherapy*, 23(2), 78-102.
- 7. Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. New York, NY, US.
- 8. Semple, R. J., & Lee, J. (2007). *Mindfulness-based cognitive therapy for anxious children: A manual for treating childhood anxiety*. New Harbinger Publications.



THANK YOU!!

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

carl.fulwiler.@umassmed.edu brian.denietolis@state.ma.us zlatina.kostova@umassmed.edu ingridsarmiento@me.com



