

# Trauma and PTSD in Serious Mental Illness

Kim T. Mueser, Ph.D.

Center for Psychiatric Rehabilitation

Boston University

# Disclosure

---

- All my clothes were made by my son, J. Mueser
- Bespoke Hand Tailored Suits and Shirts, with stores in New York City:



J. Mueser  
19 Christopher St.  
New York, NY 10014  
[\(347\) 982-4382](tel:(347)982-4382)  
<http://jmueser.com>

# HOROWITZ ON TRAUMA(1989)

- A traumatic experience is a major life event that occurs in a sudden or forceful way. It is recognized as highly relevant to the self and does not fit well with the self's usual view of the world and personal response capabilities. The result is an association of the event with alarm emotions ideas of harm, altered states of mind, and special memory encoding.

# COMMON TRAUMATIC EVENTS

- Rape/ sexual abuse
- Combat
- Accidents
- Crime/assault
- Natural disasters (e.g., earthquake)
- Sudden, unexpected death of a loved one

\* Psychotic symptoms and treatment experiences: to be addressed later

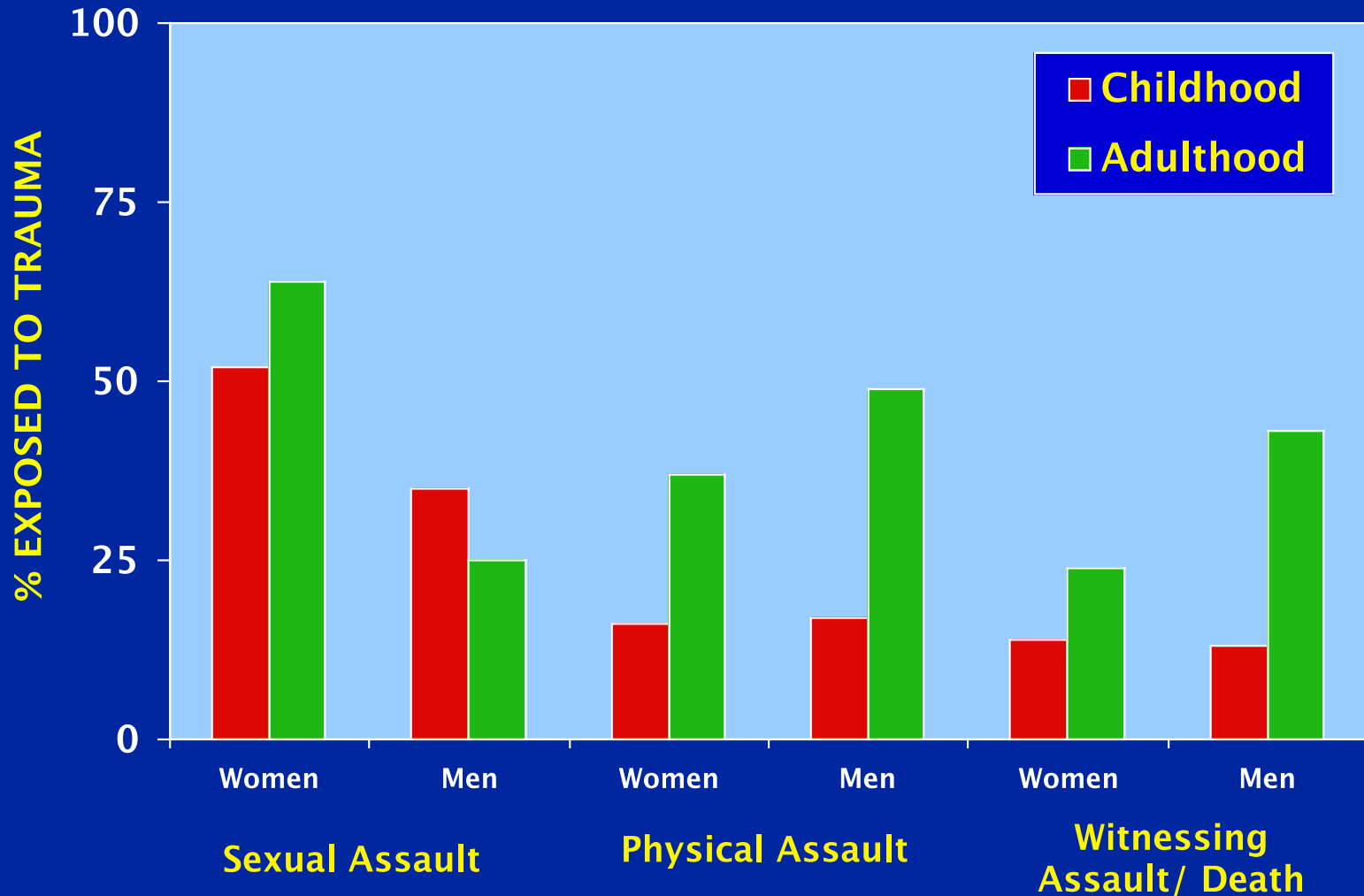
# EPIDEMIOLOGY OF TRAUMA IN GENERAL POPULATION

- 36-81% report experiencing a traumatic event in their lifetime
- National Comorbidity Survey of 6000 between 15-54:
  - 60% men exposed to traumatic event
  - 51% women exposed to traumatic event
  - 17% men & 13% women exposed to 3+ events
- Even higher rates found in special subpopulations (e.g., homeless, serious mental illness, substance use disorders)

# TRAUMA IN PERSONS WITH SEVERE MENTAL ILLNESS

- Trauma and other adverse events in childhood increase risk of developing SMI
- High rates of trauma in SMI
- Multiple traumatization is common
- History of trauma associated with more severe symptoms and distress
- Service users report traumatic experiences are important but neglected in treatment

# TRAUMA IN SMI (N=275)



Source: Mueser et al. (1998)

# PTSD: WHY FOCUS ON IT?

- Most established psychiatric consequence of trauma exposure
- High prevalence in general population, even higher in vulnerable populations, but often not detected
- Associated with increased distress and acute care service utilization
- Assessment straightforward
- Psychological treatments shown to be effective
- Pharmacological treatments also beneficial



# DSM-5 SYMPTOMS OF PTSD

- Exposure to traumatic event

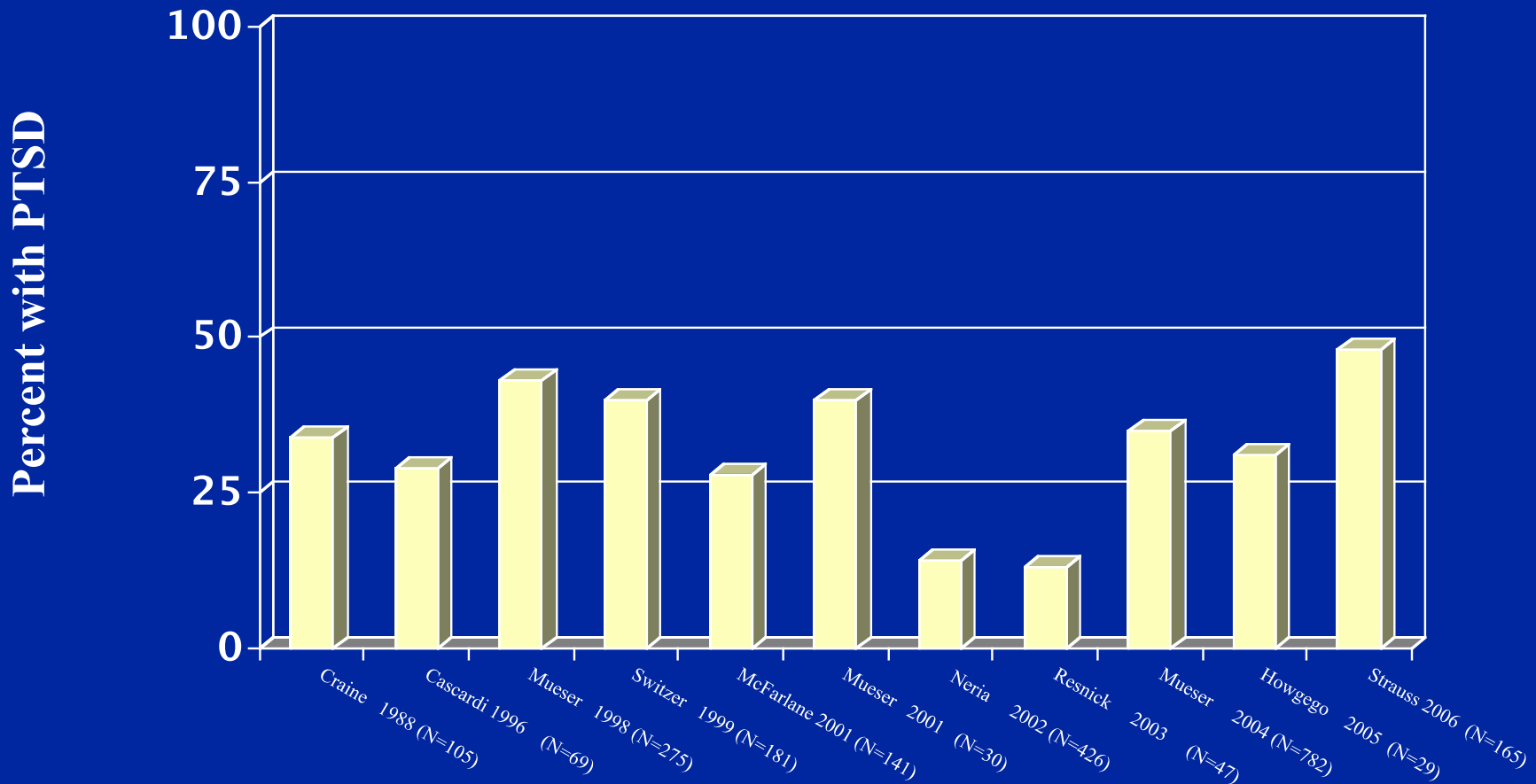
## Symptom criteria:

- Intrusion symptoms (e.g., intrusive memories, flashbacks, nightmares)
- Avoidance of trauma-related stimuli (e.g., avoiding memories, situations related to trauma)
- Over-arousal (e.g., hypervigilance, difficulty sleeping, anger outbursts, exaggerated startle)
- Negative alterations in cognition or mood (e.g., inability to remember parts of event, persistent negative feelings, detachment from others)

# OTHER COMMON SYMPTOMS RELATED TO PTSD

- Suicidality, self-injurious behavior
- Substance abuse
- Hallucinations
- Mild delusions (e.g., paranoia)

# PTSD IN PERSONS WITH SMI: 25-45% PREVALENCE RATE IN MOST STUDIES



# ASSESSMENT OF TRAUMA & PTSD

- Brief trauma & PTSD screening measures valid in clients with SMI
- No “typical” client with SMI & PTSD
- Screening recommended for all clients
- Measures can be administered by self-report or interview
- Prepare client by explaining you will ask about some difficult experiences he/she may have had in the past
- Be matter-of-fact & use behaviorally specific language
- Avoid “loaded” words such as “abuse” or “rape” unless client uses them

# STRESSFUL EVENTS SCREENING QUESTIONNAIRE

- 16 questions
- Sexual abuse/assault, physical abuse/assault, witnessing violence, accidents, combat and unexpected death of a loved one.

# PCL-5

- PTSD Checklist-5 (PCL) is a 20 item self report rating scale
- Items correspond to the DSM-V symptoms of PTSD
- Clients rate how much they have been bothered by each symptom in the past months on an anchored 5-point scale
- Total PCL scores over 40 indicate probable PTSD
- The PCL has good reliability with structured interviews for PTSD, such as the Clinician Administered PTSD Scale
- PCL also useful for monitoring effects of CBT for PTSD program

# TREATMENT OF PTSD

- Effective treatments of PTSD exist in general population, such as prolonged exposure, cognitive processing therapy, and EMDR
- However, general population studies of PTSD treatment have ruled people with SMI due to psychotic symptoms, suicidal ideation, and cognitive impairment
- Research has only recently developed and evaluated treatments for PTSD in people with SMI
- Promising results from randomized controlled trials (RCTs) on cognitive restructuring (3 RCTs), and prolonged exposure and EMDR (1 RCT: van den Berg)

# COGNITIVE RESTRUCTURING PROGRAM (Mueser and Rosenberg)

- Does not require direct “exposure” to memories of traumatic events or detailed recounting of traumatic experiences
- Based on cognitive theories of trauma that PTSD results from the effects of events on people perceptions and beliefs about:
  - The world (e.g., “The world is an unsafe, cruel place”)
  - Other people (e.g., “You can’t trust anyone”)
  - Oneself (e.g., “It’s my fault”, “I should have gotten over it by now”, “I’m a weak and vulnerable person”, “My life is ruined”)
- Teaches cognitive restructuring (CBT) as a skill for helping people examine, challenge, and change post-traumatic thoughts and beliefs that underlie PTSD symptoms



# LOGISTICS

- 12-16 week individual CBT program
  - Group version of program also exists, but controlled research only on individual program
- Treatment provided at local community mental health centers, integrated with other services
- Eligibility: People with SMI, regardless of diagnosis (e.g., schizophrenia, bipolar disorder, major depression, borderline personality disorder)
- Program includes: breathing retraining, psychoeducation, and cognitive restructuring
- Extensive series of handouts used

# THErapy Modules

1. Overview (Session 1)
2. Distress response plan (Session 1)
3. Breathing retraining (Session 1)
4. Psychoeducation I (Sessions 1-2)\*
5. Psychoeducation II (Session 3)\*
6. Cognitive restructuring I (Sessions 4-6)\*
7. Cognitive restructuring II (Sessions 7-12+)\*
8. Generalization Training & Termination (last session)

\* Described in following slides

# SESSIONS 1-3: PSYCHOEDUCATION

- Covers PTSD symptoms and associated problems
- Interactive
- Questions frequently asked to help clients relate information to their own experiences
- Adopt client's language
- Use worksheets to help clients identify their own symptoms and trauma consequences
- Complete some worksheets in session; assign homework to complete others
- Ask review questions to check client understanding
- Abbreviate material when working with clients with severe cognitive impairment or symptoms

# SESSIONS 4-6: COGNITIVE RESTRUCTURING I (COMMON STYLES)

- Thought-feeling-behavior triad
- Common Inaccurate Styles of Thinking”
  - All or nothing thinking
  - Jumping to conclusions
  - Overgeneralization
  - Selective attention
  - “Must,” “should,” or “never” statements
  - Catastrophizing
  - Emotional reasoning

# COMMON STYLES, CONT'D

- Normalize common styles as errors everyone makes, but may be more common in PTSD
- Explain how correcting common styles can reduce negative feelings associated with thought
- Practice recognizing and changing common inaccurate styles of thinking in session
- Home assignment to practice skill between session
- Cue for when to use cognitive restructuring: when person has a negative feeling

# SESSIONS 7+: THE 5 STEPS OF COGNITIVE RESTRUCTURING

- Builds on Common Inaccurate Styles of Thinking
- More powerful tool for dealing with negative feelings
  - Easier to address core schemas underlying PTSD symptoms
  - Provides solution to upsetting thoughts that are supported by the available evidence
- 5 steps of Cognitive Restructuring:
  - Describe situation
  - Identify strongest emotion
  - Identify strongest thought or belief (“Guide to Thoughts and Feelings”)
  - Evaluate the thought
  - Take action: Either change the thought or develop an action plan to deal with the situation (or both)

# 5 STEPS OF COGNITIVE RESTRUCTURING

## 1. Situation

Ask yourself, “What happened that made me upset?” Write down a brief description of the situation.

---

## 2. Feeling

Circle your strongest feeling:

Fear/Anxiety

Sadness/Depression

Guilt/Shame

Anger

## 3. Thought

Ask yourself, “What am I thinking that is leading me to feel this way?” Write down your thoughts below:

---

---

### Is this thought a **Common Style of Thinking?**

If yes, circle the one:

- All-or-Nothing      Over-Generalizing      Must/Should/Never
- Catastrophizing      Emotional Reasoning      Overestimation of Risk
- Self-Blame      Mental Filter

#### 4. Evaluate Your Thought:

Now ask yourself, “What evidence do I have for this thought?” Write down the answers that do support your thought and the answers that do not support your thought.

*Things that DO support my thought:*

---

---

---

*Things that DO NOT support my thought:*

---

---

---

#### 5. Take Action!

Next, ask yourself, “Do things mostly support my thought or do things mostly NOT support my thought?”

**NO**, the evidence does *not* support my thought. Come up with a new thought that is supported by the evidence.

New

Thought \_\_\_\_\_

**YES**, the evidence *does* support my thought. Decide what you need to do next in order to deal with the situation. Write down your Action Plan for dealing with the upsetting situation:

Action Plan: \_\_\_\_\_

---



## 1. BRIEFLY DESCRIBE THE UPSETTING SITUATION

Ask yourself, "What happened that made me upset?" Write down a brief description of the situation.

Situation: **Thinking about the sexual assault**

### ▪ IDENTIFY YOUR STRONGEST FEELING

Ask yourself, "Am I feeling fear or anxiety? Am I feeling sad or depressed? Am I feeling guilty or ashamed? Am I feeling angry?" Write down the strongest feeling you are experiencing.

Strongest Feeling: **Guilt and Shame**

### 3. IDENTIFY YOUR THOUGHTS

Ask yourself, "What am I thinking that is leading me to feel this way?" Write down your thoughts below.

Thoughts: 1) I am responsible for the sexual assault.

2) I am a sick, twisted, weak individual who acted against his own principles.

3) I am disgusting because I willingly engaged in a relationship with another man.

Choose one thought, from the list above, that is most strongly related to your strongest feeling (identified in Step 2).

Thought most strongly related to strongest feeling: # 1

Ask yourself, "What common style of thinking am I using here?"

Common Style of Thinking: All or None Thinking

## 4. CHALLENGE YOUR THOUGHT

Thought most strongly related to strongest feeling (from Step 3):

I am responsible for the sexual assault.

Now, ask yourself, “What evidence do I have for this thought?”, “Is there an alternate way to look at this situation?”, “How would someone else think about the situation?” Write down the answers that do support your thought and the answers that do not support your thought.

Things that DO support my thoughts:

- I was drinking that night and passed out.
- I engaged in a consensual relationship with him following the assault.
- I should have known better.
- He was a friend.
- I should not have been hanging out with him, but I needed a place to live.

Things that DO NOT support my thought:

- It was against my will. I was held down by one man and raped by another.
- I did not want to be raped.
- I was unable to protect myself.
- I was in a compromised situation (i.e. I needed him to provide me with shelter).
- I had no reason to suspect that a "friend" would rape me.

Next, ask yourself, “Do things mostly support my thought or do things mostly NOT support my thought?” Look at all the things that support your thought and balance that against all the things that do not support your thought. Check below whether your thought is supported by the evidence or not.

NO, my thought is NOT supported by the evidence.

YES, my thought IS supported by the evidence.

## 5. TAKE ACTION!

If your thought is NOT supported by the evidence, come up with a new thought that is supported by the evidence. These thoughts are usually more balanced & helpful. Write your new, more helpful thought in the space below. And remember, when you think of this upsetting situation in the future, replace your unhelpful automatic thought with the new, more accurate thought.

New Thoughts: **While my drinking and other circumstances may have put me at risk, I am not responsible for the abuse.**

If your thought IS supported by the evidence, decide what you need to do next in order to deal with the situation. Ask yourself, “Do I need to get more information about what to do?”, “Do I need to get some help?”, “Do I need to take steps to make sure I am safe?” Below, write down below the next step you will take to deal with the upsetting situation.

Next Step:

---

# RESEARCH ON COGNITIVE RESTRUCTURING PROGRAM FOR PTSD

- Multiple open pilot feasibility studies of individual-based or group-based Cognitive Restructuring Program
- 3 randomized controlled trials (RCTs) comparing CR Program for PTSD in persons with SMI
  - Compared CR Program with treatment as usual (TAU) at 5 sites in rural NH/VT in 108 persons with SMI, 75% with severe PTSD ; 6-month follow-up (Mueser et al., 2008)
  - Compared CR Program with Brief PTSD program (3-session) at 5 sites in urban NJ in 201 persons with SMI and severe PTSD; 12-month follow-up (Mueser et al., 2015; Slade et al., 2017)
  - Compared CR Program with TAU in 61 clients with schizophrenia and PTSD in Great Britain ; 12-month follow-up (Steel et al., 2017)
- 2 RCTs conducted in NH/VT and NJ included 25% of clients with borderline personality disorder (Kredlow, 2017)

# GENERAL FINDINGS OF RCTS OF CR PROGRAM

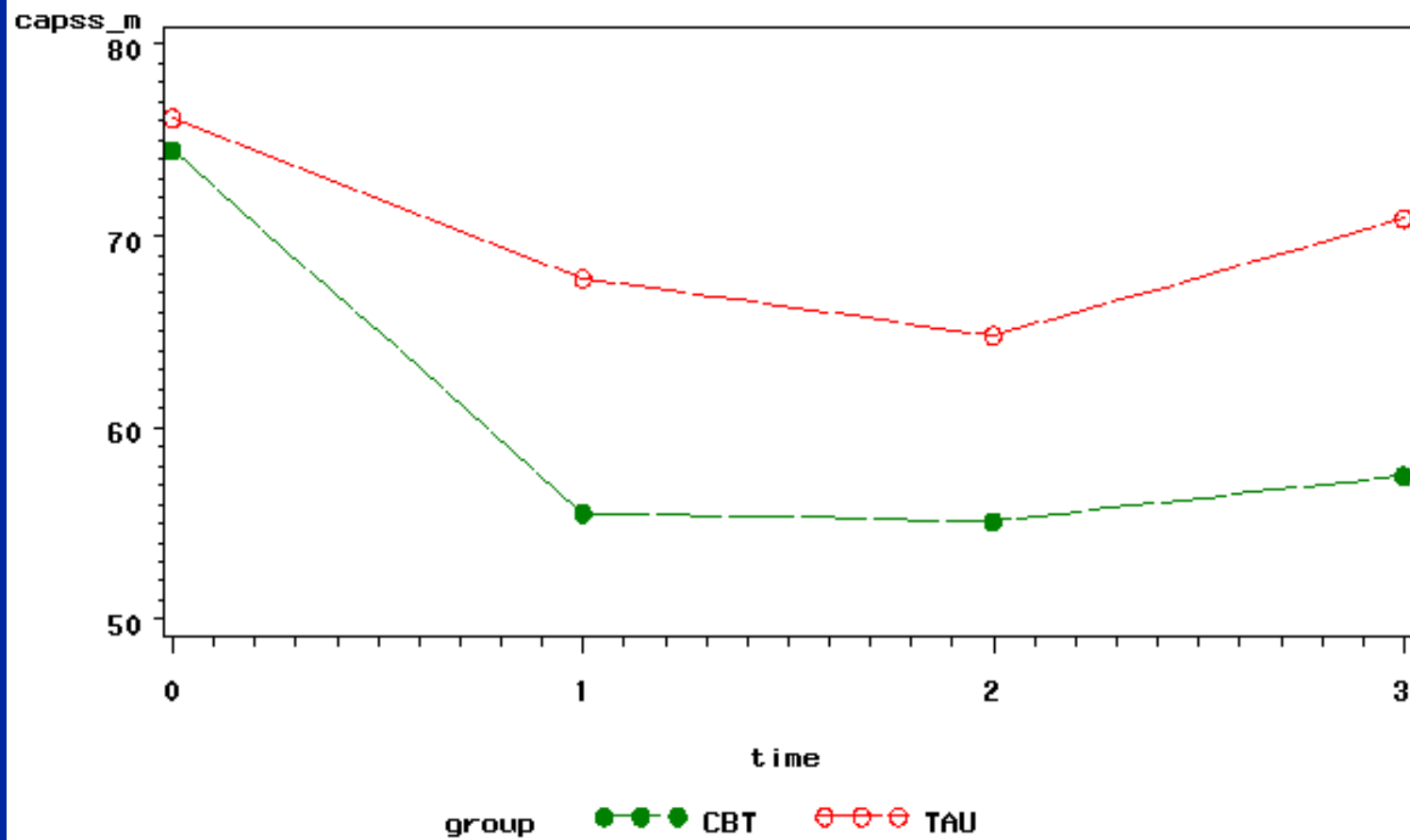
- High rates of treatment retention and exposure to CR Program
- Frontline M.A. level clinicians could be readily trained to fidelity criteria usually with one case
- Both RCTs conducted in U.S. with persons with SMI and severe PTSD showed beneficial effects of CR program compared to TAU or Brief tx. (Mueser et al., 2008, 2015)
- Smaller RCT in Great Britain did not find differences between CR and TAU; both groups improved in PTSD symptoms (Steel et al., 2017)
  - PTSD diagnosis based on Clinician Administered PTSD Scale (CAPS) less stable for people with SMI than than CAPS diagnosis of severe PTSD (CAPS total > 65) (Mueser et al., 2001), suggesting low diagnostic stability of PTSD in this study



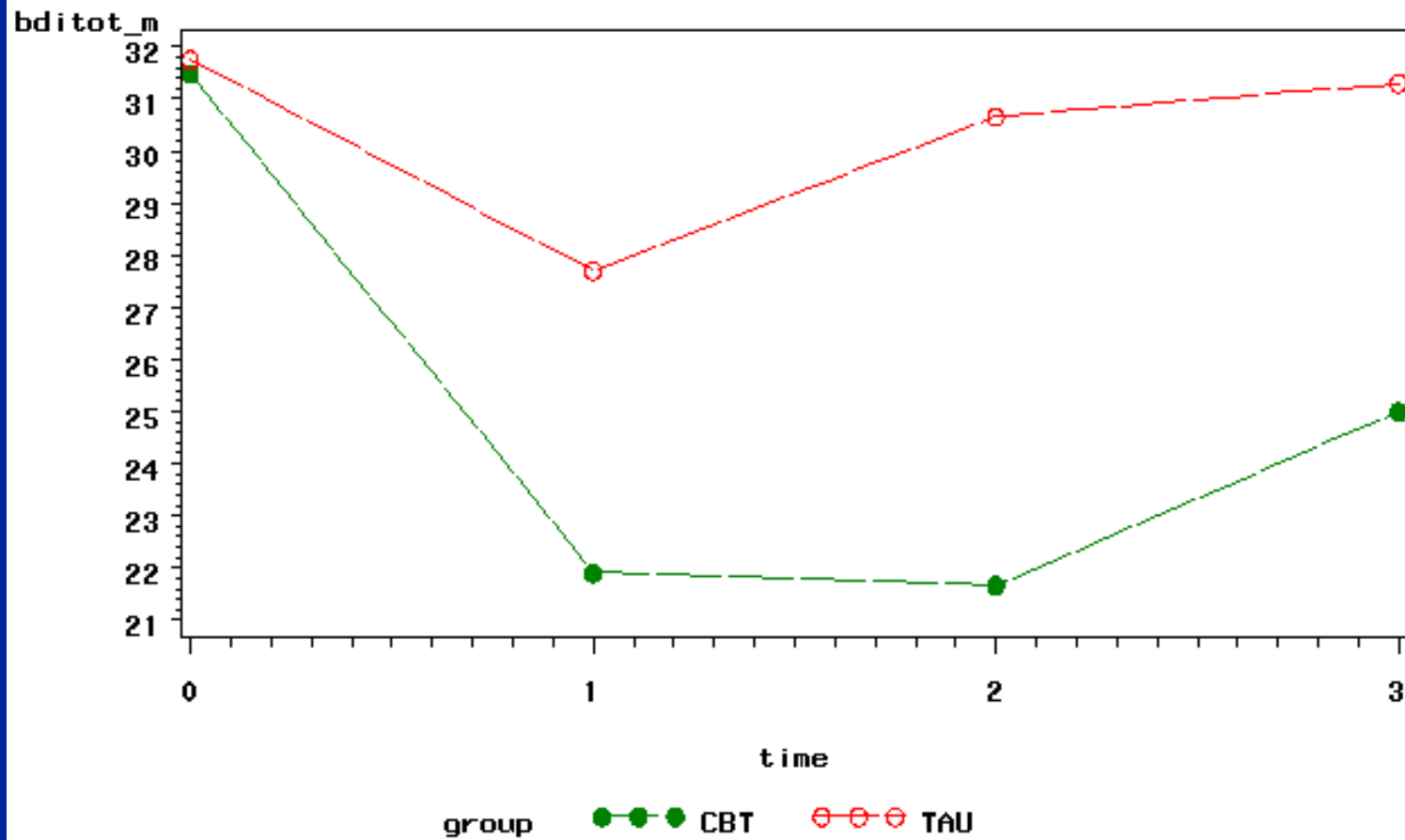
# RESULTS OF 2 RCTs OF CR PROGRAM IN CLIENTS WITH SMI AND SEVERE PTSD

- Figure 1: Differences between CR and TAU groups in PTSD severity (CAPS total): NH/VT Study (Mueser et al., 2008)
- Figure 2: Differences between CR and TAU groups in depression severity (BDI-2): NH/VT Study (Mueser et al., 2008)
- Figure 3: Differences between CR and Brief groups in PTSD diagnosis (based on CAPS): NJ Study (Mueser et al., 2015)
- Figure 4: Differences between CR and Brief groups in global functioning (GAF): NJ Study (Mueser et al., 2015)
  
- Both RCTs conducted in U.S. with persons with SMI and severe PTSD showed beneficial effects of CR program compared to TAU or Brief tx. (Mueser et al., 2008, 2015)
- Smaller RCT in Great Britain did not find differences between CR and TAU; both groups improved in PTSD symptoms (Steel et al., 2017)
  - PTSD diagnosis based on Clinician Administered PTSD Scale (CAPS) less stable for people with SMI than than CAPS diagnosis of severe PTSD (CAPS total > 65) (Mueser et al., 2001), suggesting low diagnostic stability of PTSD in this study

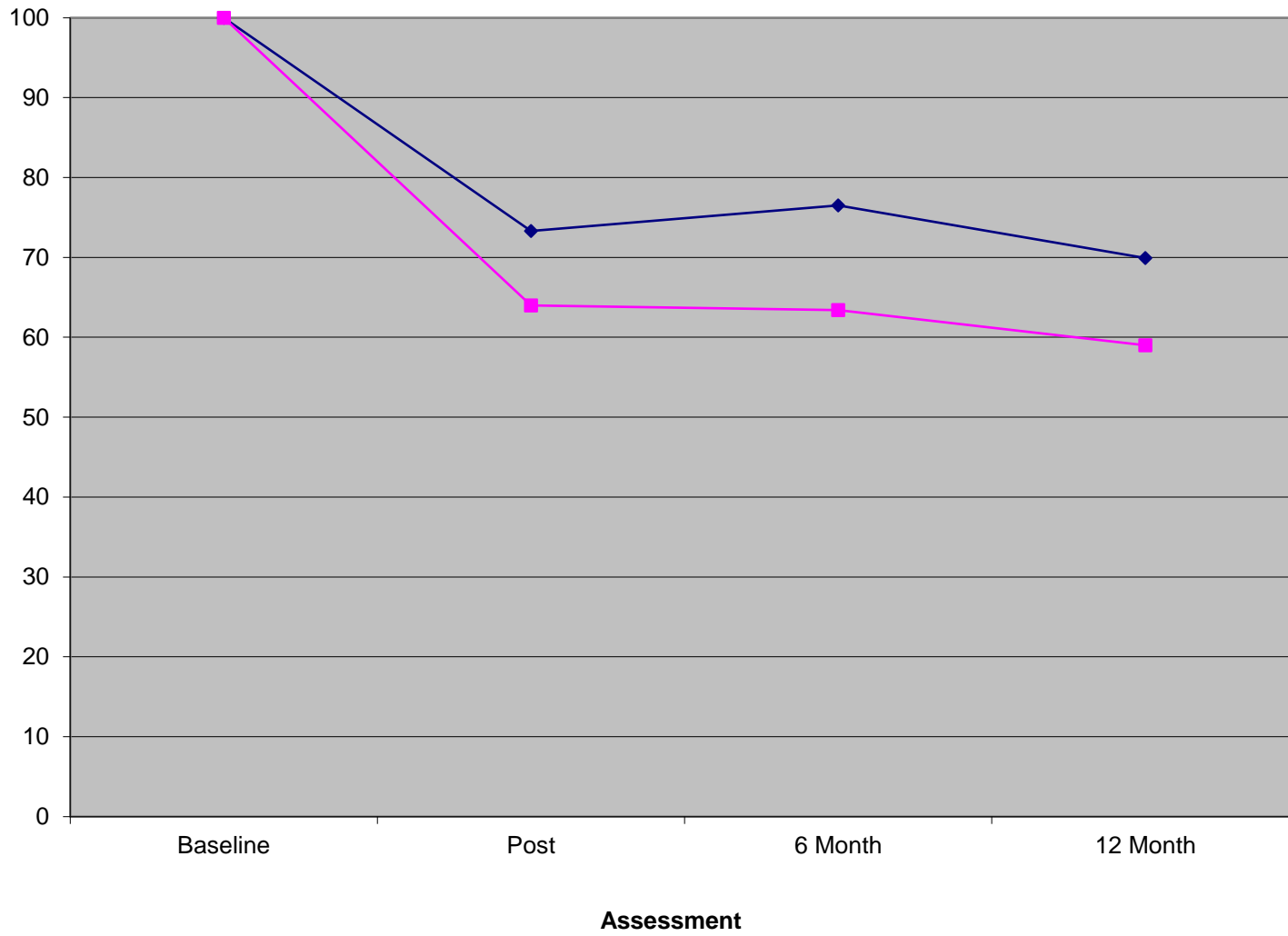
Mean capss\_m scores for both cbt and tau groups



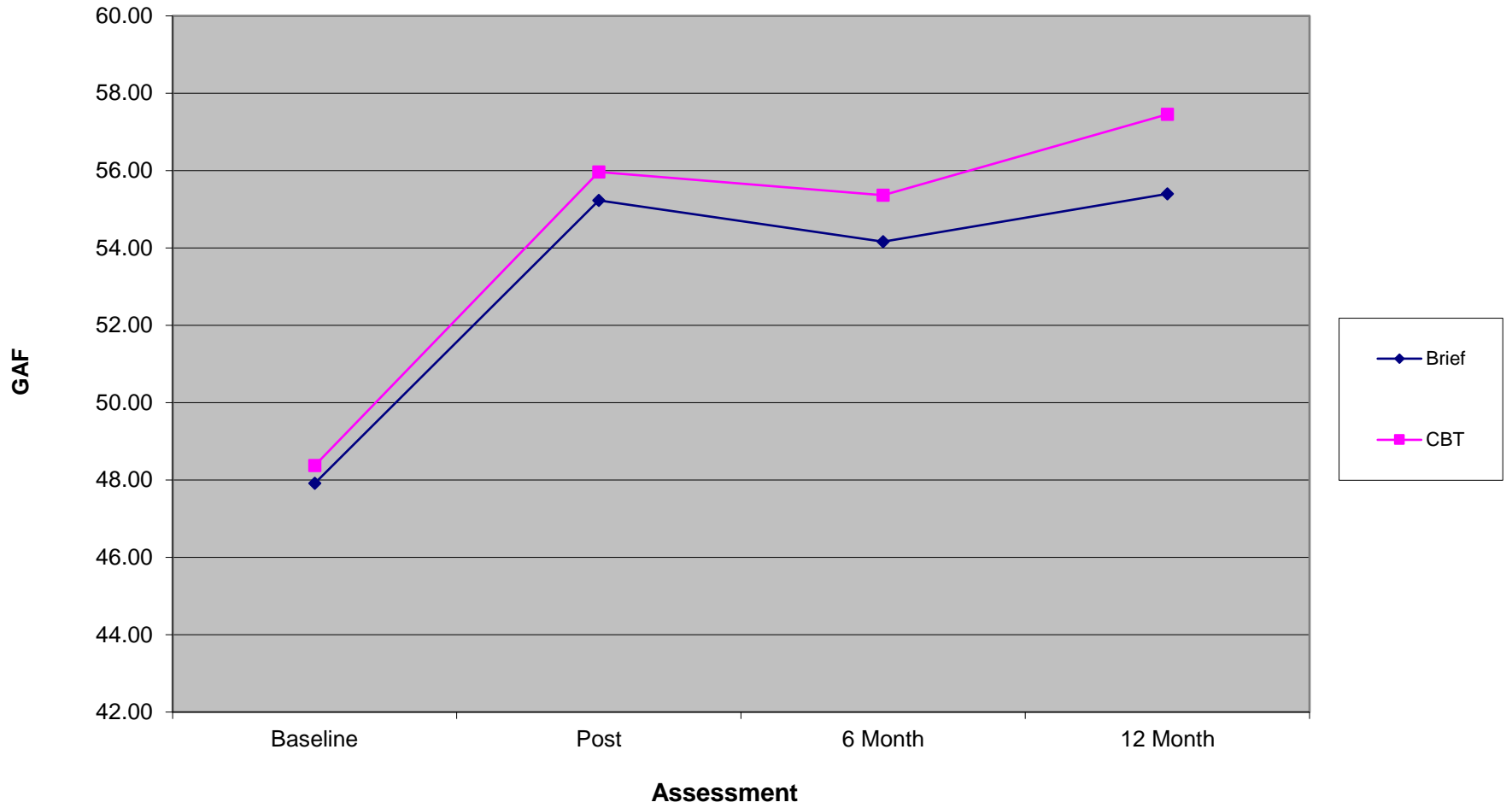
Mean bditot\_m scores for both cbt and tau groups



# PTSD Percent



# GAF



# THE TRAUMA OF PSYCHOSIS

- Psychotic symptoms and treatment experiences can be traumatic and lead to PTSD symptoms
- Psychotic symptoms
  - Hallucinations
  - Delusions
  - Bizarre behavior
- Treatment experiences
  - Involuntary hospitalization
  - Seclusion/restraints
  - Forced medication
  - Exposure to severely disorganized or threatening people

# CONSUMER EXPERIENCES IN RESPONSE TO TRAUMA OF PSYCHOSIS

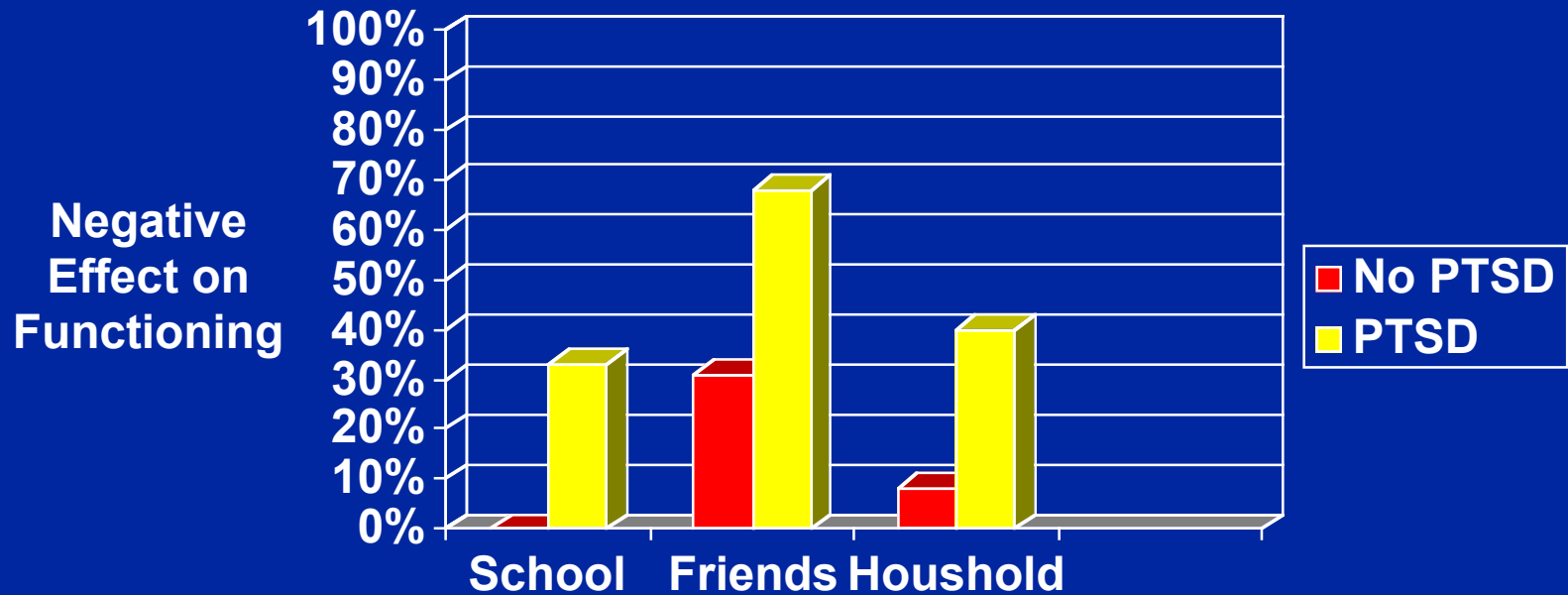
- Fear in response to symptoms
- Embarrassment about social behaviors
- Resentment about coercive treatment practices
- Anxiety after symptom stabilization about recurrence of symptoms
- Fear of loss of control over self

# PTSD IN RESPONSE TO PSYCHOTIC SYMPTOMS AND TREATMENT

- First described by Shaner & Eth (1989) and McGorry et al. (1991)
- Examined in 10+ studies
- PTSD rates: 31% & 61% in all studies but 1 (11% in Meyers et al.)
- Are there differences in PTSD rates related to psychosis or treatment experiences between first episode psychosis (FEP) and multi-episode clients?
  - Addressed in 2 studies: Mueser et al. (2010) and Lu, Mueser et al. (2011)
  - The answer is NO!: About 50% of clients in both studies had PTSD related to psychosis or treatment
  - People with PTSD were more distressed and functioned more poorly than those without (next slide)



# IMPACT ON FUNCTIONING OF PTSD RELATED TO SYMPTOMS OR TREATMENT IN PEOPLE WITH FEP (MUESER ET AL., 2011)



# IMPLICATIONS OF FINDINGS FOR ILLNESS MANAGEMENT

- Psychiatric symptoms may trigger memories of psychosis or treatment
- Participation in treatment may trigger such memories
- Clients may avoid trauma-related stimuli (including treatment)
- Helping clients process and overcome trauma of psychosis and treatment may improve treatment involvement and long-term outcomes

# TREATMENT OPTIONS

- Cognitive restructuring program, as previously described
- “Processing the Psychotic Episode”, special module in Individual Resiliency Training (IRT) component of NAVIGATE program for FEP (Mueser et al., 2015)

# PROCESSING THE PSYCHOTIC EPISODE

## 2 different sections

### 1. Telling your story

- Exploring upsetting aspects of psychotic episode
- Review how telling story could be helpful with example
- Work together to develop client's cohesive narrative

### 2. Challenging self defeating thoughts and beliefs

- Rationale for cognitive restructuring to identify and modify self-stigmatizing beliefs
- Practice cognitive restructuring to address self-defeating thoughts

TREATMENT OF  
**Posttraumatic Stress Disorder**  
in Special Populations



A COGNITIVE  
RESTRUCTURING  
PROGRAM

Kim T. Mueser, Stanley D. Rosenberg,  
and Harriet J. Rosenberg

# TREATMENT FOR POSTDISASTER DISTRESS

A Transdiagnostic  
Approach



Jessica L. Hamblen and Kim T. Mueser

# CONCLUSIONS

- Trauma and PTSD are common in people with SMI, and contribute to a worse course of illness
- PTSD can be reliably assessed in persons with SMI using standardized measures
- The Cognitive Restructuring Program is effective for treating PTSD in people with SMI
- PTSD can also result from the trauma of psychotic symptoms and treatment experiences
- Need to increase training and dissemination of CBT for PTSD interventions in persons with SMI, such as the Cognitive Restructuring Program

# REFERENCES

- Hamblen, J. L., & Mueser, K. T. (2021). *Treatment for Postdisaster Distress: A Transdiagnostic Approach*. Washington, DC: American Psychological Association.
- Lu, W., Mueser, K. T., Shami, A., Siglag, M., Petrides, G., Schoepp, E., Putts, M., & Saltz, J. (2011). Post-traumatic reactions to psychosis in people with multiple psychotic episodes. *Schizophrenia Research*, *127*, 66-75.
- Mueser, K. T., Goodman, L. A., Trumbetta, S. L., Rosenberg, S. D., Osher, F. C., Vidaver, R., Auciello, P., & Foy, D. W. (1998). Trauma and posttraumatic stress disorder in severe mental illness. *Journal of Consulting and Clinical Psychology*, *66*, 493-99.
- Mueser, K. T., Gottlieb, J. D., Xie, H., Lu, W., Yanos, P. T., Rosenberg, S. R., Silverstein, S. M., Duva, S. M., Minsky, S., Wolfe, R., & McHugo, G. J. (2015). Evaluation of cognitive restructuring for PTSD in people with severe mental illness. *British Journal of Psychiatry*, *206*, 501-8.
- Mueser, K. T., Lu, W., Rosenberg, S. D., & Wolfe, R. (2010). The trauma of psychosis: Posttraumatic stress disorder and recent onset psychosis. *Schizophrenia Research*, *116*, 217-27.
- Mueser, K. T., Penn, D. L., Addington, J., Brunette, M. F., Gingerich, S., Glynn, S. M., Lynde, D. W., Gottlieb, J. D., Meyer-Kalos, P., Cather, C., McGurk, S. R., Saade, S., Robinson, D. G., Schooler, N. R., Rosenheck, R. A., & Kane, J. M. (2015). The NAVIGATE program for first episode psychosis: Rationale, overview, and description of psychosocial components. *Psychiatric Services*, *66*, 680-90.
- Mueser, K. T., Rosenberg, S. D., & Rosenberg, H. J. (2009). *Treatment of Posttraumatic Stress Disorder in Special Populations: A Cognitive Restructuring Program*. Washington, DC: American Psychological Association.
- Mueser, K. T., & Rosenberg, S. R. (2003). Treating the trauma of first episode psychosis: A PTSD perspective. *Journal of Mental Health*, *12*, 103-08.
- Shaner, A., & Eth, S. (1989). Can schizophrenia cause posttraumatic stress disorder? *American Journal of Psychotherapy*, *43*, 588-97.
- NAVIGATE Training Website (where all NAVIGATE manuals can be downloaded for free): <http://navigateconsultants.org>
- van den Berg, D. P., de Bont, P. A., van der Vleugel, B. M., de Roos, C., de Jonge, A., van Minnen, A., & van der Gaag, M. (2016). Trauma-focused treatment in PTSD patients with psychosis: Symptom exacerbation, adverse events, and revictimization. *Schizophrenia Bulletin*, *42*, 693-702.
- Van den Berg, D. P. G., de Bont, P. A. J. M., van der Vleugel, B. M., de Roos, A., de Jongh, A., van Minnen, A., & van der Gaag, M. (2015). Prolonged exposure versus eye movement desensitization and reprocessing versus waiting list for posttraumatic stress disorder in patients with a psychotic disorder. *JAMA Psychiatry*, *72*, 259-67.