

Psychotherapy for psychiatric disorders: A review of 4 studies

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Psychotherapy is among the evidence-based treatment options for treating various psychiatric disorders. How we approach psychiatric disorders via psychotherapy has been shaped by numerous theories of personality and psychopathology, including psychodynamic, behavioral, cognitive, systems, and existential-humanistic approaches. Whether used as primary treatment or in conjunction with medication, psychotherapy has played a pivotal role in shaping psychiatric disease management and treatment. Several evidence-based therapy modalities have been used throughout the years and continue to significantly improve and impact our patients' lives. In the armamentarium of treatment modalities, therapy takes the leading role for several conditions. Here we review 4 studies from current psychotherapy literature; these studies are summarized in the *Table*¹⁻⁴ (page 44).

1. Pompoli A, Furukawa TA, Efthimiou O, et al. Dismantling cognitive-behaviour therapy for panic disorder: a systematic review and component network meta-analysis. *Psychol Med.* 2018;48(12):1945-1953.

Panic disorder has a lifetime prevalence of 3.7% in the general population. Three treatment modalities recommended for patients with panic disorder are psychological therapy, pharmacologic therapy, and self-help. Among the psychological therapies, cognitive-behavioral therapy (CBT) is one of the most widely used.¹

Cognitive-behavioral therapy for panic disorder has been proven to be an efficacious

and impactful treatment. For panic disorder, CBT may consist of different combinations of several therapeutic components, such as relaxation, breathing retraining, cognitive restructuring, interoceptive exposure, and/or *in vivo* exposure. It is therefore important, both theoretically and clinically, to examine whether specific components of CBT or their combinations are superior to others for treating panic disorder.¹

Pompoli et al¹ conducted a component network meta-analysis (NMA) of 72 studies in order to determine which CBT components were the most efficacious in treating patients with panic disorder. Component NMA is an extension of standard NMA; it is used to disentangle the treatment effects of different components included in composite interventions.¹

The aim of this study was to determine which specific component or combination of components was superior to others when treating panic disorder.¹

Study design

- Researchers reviewed 2,526 references from Medline, EMBASE, PsycINFO, and Cochrane Central and selected 72



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Trials evaluated therapies for panic disorder, PTSD, antisocial behavior, and ADHD

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Clinical Point

Psychotherapy has played a pivotal role in shaping psychiatric disease management and treatment

Table

Psychotherapy for psychiatric disorders: 4 studies

Study	Design	Outcomes
Pompoli et al ¹ (2018)	Component network meta-analysis of 4,064 patients from 72 trials to determine which components of CBT were superior for treating panic disorder	Interceptive exposure and face-to-face setting (administration of therapeutic components in a face-to-face setting rather than through self-help means) were associated with better treatment efficacy and acceptability
Sloan et al ² (2018)	Noninferiority trial in which 126 adults with PTSD who were receiving stable medication regimens were randomized to written exposure therapy or cognitive processing therapy	Improvements in PTSD symptoms in the written exposure therapy group were noninferior to improvements in the cognitive processing therapy group
Fonagy et al ³ (2018)	Patients age 11 to 17 with moderate to severe antisocial behavior and their families (N = 684) were randomized to multisystemic therapy or management as usual	Compared with management as usual, multisystemic therapy had no effect on the risk of out-of-home placement, time to first criminal offense, or total number of offenses
Janssen et al ⁴ (2019)	Single-blind RCT in which 120 adults with ADHD were randomized to mindfulness-based cognitive therapy plus TAU, or TAU only	Compared with TAU only, mindfulness-based cognitive therapy plus TAU resulted in a significant decrease in clinician-rated ADHD symptoms, and this decrease was maintained at 6 months

ADHD: attention-deficit/hyperactivity disorder; CBT: cognitive-behavioral therapy; PTSD: posttraumatic stress disorder; RCT: randomized controlled trial; TAU: treatment as usual

studies that included 4,064 patients with panic disorder.¹

- The primary outcome was remission of panic disorder with or without agoraphobia in the short term (3 to 6 months). Remission was defined as achieving a score of ≤ 7 on the Panic Disorder Severity Scale (PDSS).¹

- Secondary outcomes included response ($\geq 40\%$ reduction in PDSS score from baseline) and dropout for any reason in the short term.¹

Outcomes

- Using component NMA, researchers determined that interoceptive exposure and face-to-face setting (administration of therapeutic components in a face-to-face setting rather than through self-help means) led to better efficacy and acceptability. Muscle relaxation and virtual reality exposure corresponded to lower efficacy. Breathing retraining and *in vivo* exposure improved treatment acceptability, but had small effects on efficacy.¹

- Based on an analysis of remission rates, the most efficacious CBT incorporated cognitive restructuring and interoceptive exposure. The least efficacious CBT incorporated breathing retraining, muscle relaxation, *in vivo* exposure, and virtual reality exposure.¹

- Application of cognitive and behavioral therapeutic elements was superior to administration of behavioral elements alone. When administering CBT, face-to-face therapy led to better outcomes in response and remission rates. Dropout rates occurred at a lower frequency when CBT was administered face-to-face when compared with self-help groups. The placebo effect was associated with the highest dropout rate.¹

Conclusion

- Findings from this meta-analysis have high practical utility. Which CBT components are used can significantly alter CBT's efficacy and acceptability in patients with panic disorder.¹



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- The “most efficacious CBT” would include cognitive restructuring and interoceptive exposure delivered in a face-to-face setting. Breathing retraining, muscle relaxation, and virtual reality may have a minimal or even negative impact.¹

- Limitations of this meta-analysis include the high number of studies used for the data analysis, complex statistical analysis, inability to include unpublished studies, and limited relevant studies. A future implication of this study is the consideration of formal methodology based on the clinical application of efficacious CBT components when treating patients with panic disorder.¹

2. Sloan DM, Marx BP, Lee DJ, et al. A brief exposure-based treatment vs cognitive processing therapy for posttraumatic stress disorder: a randomized noninferiority clinical trial. *JAMA Psychiatry*. 2018;75(3):233-239.

Psychotherapy is also a useful modality for treating posttraumatic stress disorder (PTSD). Sloan et al² compared brief exposure-based treatment with cognitive processing therapy (CPT) for PTSD.

Clinical practice guidelines for the management of PTSD and acute stress disorder recommend the use of individual, trauma-focused therapies that focus on exposure and cognitive restructuring, such as prolonged exposure, CPT, and written narrative exposure.⁵

One type of written narrative exposure treatment is written exposure therapy (WET), which consists of 5 sessions during which patients write about their trauma. The first session is comprised of psychoeducation about PTSD and a review of treatment reasoning, followed by 30 minutes of writing. The therapist provides feedback and instructions. Written exposure therapy requires less therapist training and less supervision than prolonged exposure or CPT. Prior studies have suggested that WET can significantly reduce PTSD symptoms in various trauma survivors.²

Although efficacious for PTSD, WET had not been compared with CPT, which is the most commonly used first-line treatment of PTSD. The aim of this study was to determine whether WET is noninferior to CPT.²

Study design

- In this randomized noninferiority clinical trial conducted in Boston, Massachusetts from February 28, 2013 to November 6, 2016, 126 veterans and non-veteran adults were randomized to WET or CPT. Participants met DSM-5 criteria for PTSD and were taking stable doses of their medications for at least 4 weeks.²

- Participants assigned to CPT (n = 63) underwent 12 sessions, and participants assigned to WET (n = 63) received 5 sessions. Cognitive processing therapy was conducted over 60-minute weekly sessions. Written exposure therapy consisted of an initial session that was 60 minutes long and four 40-minute follow-up sessions.²

- Interviews were conducted by 4 independent evaluators at baseline and 6, 12, 24, and 36 weeks. During the WET sessions, participants wrote about a traumatic event while focusing on details, thoughts, and feelings associated with the event.²

- Cognitive processing therapy involved 12 trauma-focused therapy sessions during which participants learn how to become aware of and address problematic cognitions about the trauma as well as thoughts about themselves and others. Between sessions, participants were required to write 2 trauma accounts and complete other assignments.²

Outcomes

- The primary outcome was change in total score on the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5). The CAPS-5 scores for participants in the WET group were noninferior to those for participants in the CPT group at all assessment points.²

- Participants did not significantly differ in age, education, income, or PTSD severity.

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For panic disorder, the most efficacious CBT included cognitive restructuring and interoceptive exposure

continued

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Although it requires fewer sessions, written exposure therapy was noninferior to cognitive processing therapy for PTSD

Participants in the 2 groups did not differ in treatment expectations or level of satisfaction with treatment. Individuals assigned to CPT were more likely to drop out of the study: 20 participants in the CPT group dropped out in the first 5 sessions, whereas only 4 dropped out of the WET group. The dropout rate in the CPT group was 39.7%. Improvements in PTSD symptoms in the WET group were noninferior to improvements in the CPT group.²

- Written exposure therapy showed no difference compared with CPT in decreasing PTSD symptoms. Furthermore, this study demonstrated that PTSD symptoms can decrease with a smaller number of shorter therapeutic sessions.²

Conclusion

- This study demonstrated noninferiority between an established, commonly used PTSD therapy (CPT) and a version of exposure therapy that is briefer, simpler, and requires less homework and less therapist training and expertise. This “lower-dose” approach may improve access for the expanding number of patients who require treatment for PTSD, especially in the Veterans Affairs system.²

- In summary, WET is well tolerated and time-efficient. Although it requires fewer sessions, WET was noninferior to CPT.²

3. Fonagy P, Butler S, Cottrell D, et al. Multisystemic therapy versus management as usual in the treatment of adolescent anti-social behaviour (START): a pragmatic, randomised controlled, superiority trial. *Lancet Psychiatry*. 2018;5(2):119-133.

Multisystemic therapy (MST) is an intensive, family-based, home-based intervention for young people with serious antisocial behavior. It has been found effective for childhood conduct disorders in the United States. However, previous studies that supported its efficacy were conducted by the therapy’s developers and used noncomprehensive

comparators, such as individual therapy. Fonagy et al³ assessed the effectiveness and cost-effectiveness of MST vs management as usual for treating adolescent antisocial behavior. This is the first study that was performed by independent investigators and used a comprehensive control.³

Study design

- This 18-month, multisite, pragmatic, randomized controlled superiority trial was conducted in England.³

- Participants were age 11 to 17, with moderate to severe antisocial behavior. They had at least 3 severity criteria indicating difficulties across several settings and at least one of the 5 inclusion criteria for antisocial behavior. Six hundred eighty-four families were randomly assigned to MST or management as usual, and 491 families completed the study.³

- For the MST intervention, therapists worked with the adolescent’s caregiver 3 times a week for 3 to 5 months to improve parenting skills, enhance family relationships, increase support from social networks, develop skills and resources, address communication problems, increase school attendance and achievement, and reduce the adolescent’s association with delinquent peers.³

- For the management as usual intervention, management was based on local services for young people and was designed to be in line with current community practice.³

Outcomes

- The primary outcome was the proportion of participants in out-of-home placements at 18 months. The secondary outcomes were time to first criminal offense and the total number of offenses.³

- In terms of the risk of out-of-home placement, MST had no effect: 13% of participants in the MST group had out-of-home placement at 18 months, compared with 11% in the management-as-usual group.³

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- Multisystemic therapy also did not significantly delay the time to first offense (hazard ratio, 1.06; 95% confidence interval, 0.84 to 1.33). Also, at 18-month follow-up, participants in the MST group had committed more offenses than those in the management-as-usual group, although the difference was not statistically significant.³

- Parents in the MST group reported increased parental support and involvement and reduced problems at 6 months, but the adolescents' reports of parenting behavior indicated no significant effect for MST vs management as usual at any time point.³

Conclusion

- Multisystemic therapy was not superior to management as usual in reducing out-of-home placements. Although the parents believed that MST brought about a rapid and effective change, this was not reflected in objective indicators of antisocial behavior. These results are contrary to previous studies in the United States. The substantial improvements observed in both groups reflected the effectiveness of routinely offered interventions for this group of young people, at least when observed in clinical trials.³

4. Janssen L, Kan CC, Carpentier PJ, et al. Mindfulness-based cognitive therapy v. treatment as usual in adults with ADHD: a multicentre, single-blind, randomised controlled trial. *Psychol Med.* 2019;49(1):55-65.

There is empirical support for using psychotherapy to treat attention-deficit/hyperactivity disorder (ADHD). Although medication management plays a leading role in treating ADHD, Janssen et al⁴ conducted a multicenter, single-blind trial comparing mindfulness-based cognitive therapy (MBCT) vs treatment as usual (TAU) for ADHD.

The aim of this study was to determine the efficacy of MBCT plus TAU vs TAU

only in decreasing symptoms of adults with ADHD.⁴

Study design

- This multicenter, single-blind randomized controlled trial was conducted in the Netherlands. Participants (N = 120) met criteria for ADHD and were age ≥18. Patients were randomly assigned to MBCT plus TAU (n = 60) or TAU only (n = 60). Patients in the MBCT plus TAU group received weekly group therapy sessions, meditation exercises, psychoeducation, and group discussions. Patients in the TAU-only group received pharmacotherapy and psychoeducation.⁴

- Blinded clinicians used the Connors' Adult ADHD Rating Scale to assess ADHD symptoms.⁴

- Secondary outcomes were determined by self-reported questionnaires that patients completed online.⁴

- All statistical analyses were performed on an intention-to-treat sample as well as the per protocol sample.⁴

Outcomes

- The primary outcome was ADHD symptoms rated by clinicians. Secondary outcomes included self-reported ADHD symptoms, executive functioning, mindfulness skills, positive mental health, and general functioning. Outcomes were examined at baseline and then at post treatment and 3- and 6-month follow-up.⁴

- Patients in the MBCT plus TAU group had a significant decrease in clinician-rated ADHD symptoms that was maintained at 6-month follow-up. More patients in the MBCT plus TAU group (27%) vs patients in the TAU group (4%) showed a ≥30% reduction in ADHD symptoms. Compared with patients in the TAU group, patients in the MBCT plus TAU group had significant improvements in ADHD symptoms, mindfulness skills, and positive mental health at post treatment and at 6-month follow-up. Compared with those receiving TAU only, patients treated with MBCT plus

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Multisystemic therapy was not superior to management as usual for patients with severe antisocial behavior

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Mindfulness-based cognitive therapy plus treatment as usual decreased clinician-rated ADHD symptoms

TAU reported no improvement in executive functioning at post treatment, but did improve at 6-month follow-up.⁴

Conclusion

- Compared with TAU only, MBCT plus TAU is more effective in reducing ADHD symptoms, with a lasting effect at 6-month follow-up. In terms of secondary outcomes, MBCT plus TAU proved to be effective in improving mindfulness, self-compassion, positive mental health, and executive functioning. The results of this trial demonstrate that psychosocial treatments can be effective in addition to TAU in patients with ADHD, and MBCT holds promise for adult ADHD.⁴

References

1. Pompili A, Furukawa TA, Efthimiou O, et al. Dismantling cognitive-behaviour therapy for panic disorder: a systematic review and component network meta-analysis. *Psychol Med.* 2018;48(12):1945-1953.
2. Sloan DM, Marx BP, Lee DJ, et al. A brief exposure-based treatment vs cognitive processing therapy for posttraumatic stress disorder: a randomized noninferiority clinical trial. *JAMA Psychiatry.* 2018;75(3):233-239.
3. Fonagy P, Butler S, Cottrell D, et al. Multisystemic therapy versus management as usual in the treatment of adolescent antisocial behaviour (START): a pragmatic, randomised controlled, superiority trial. *Lancet Psychiatry.* 2018;5(2):119-133.
4. Janssen L, Kan CC, Carpentier PJ, et al. Mindfulness-based cognitive therapy v. treatment as usual in adults with ADHD: a multicentre, single-blind, randomised controlled trial. *Psychol Med.* 2019;49(1):55-65.
5. US Department of Veterans Affairs and Department of Defense. VA/DoD clinical practice guideline for the management of posttraumatic stress disorder and acute stress disorder. <https://www.healthquality.va.gov/guidelines/MH/ptsd/VADoDPTSDCPGFinal082917.pdf>. Published June 2017. Accessed September 8, 2019.