



Post-traumatic stress disorders and psychotherapies for their treatment

Tomsk Polytechnic University

Andrey Averkiev ^a

^a Research School of Chemistry & Applied Biomedical Sciences

Abstract

Post-traumatic stress disorder (PTSD) is a mental health condition that is triggered by a terrifying event — either experiencing it or witnessing it. Symptoms may include flashbacks, nightmares and severe anxiety, as well as uncontrollable thoughts about the event. Most people who go through traumatic events may have temporary difficulty adjusting and coping, but with time and good self-care, they usually get better. If the symptoms get worse, last for months or even years, and interfere with your day-to-day functioning, you may have PTSD. Getting effective treatment after PTSD symptoms develop can be critical to reduce symptoms and improve function. This stress prevalent among civilian and military personnel. Current psychotherapies may place high emotional demands and lengthy treatment commitment that may hinder successful treatment completion for some patients. This article extends previous research in the field of psychotherapeutic change by providing results from the analysis of change trajectories in psychotherapeutic treatments.

Keywords: Psychotherapy, stress disorders, post-traumatic treatment, accelerated resolution therapy, creative art therapy;

1. Introduction

Post-traumatic stress disorder (PTSD) can develop after exposure to a traumatic event [2]. Corresponding with symptoms of ongoing emotional and physiological distress towards trauma reminders, PTSD has been conceptualized as disorder of emotion regulation [22]. In line with this conceptualization, PTSD is associated with impaired down-regulation of emotional, physiological and neural responding towards (potentially) threatening and trauma-related stimuli [24].

Emotion regulation refers to all conscious and non-conscious regulatory processes altering the experience or expression of emotions [12] and emotional actions. Cognitive emotion regulation strategies include reappraisal (changing the interpretation of the stimulus) [12] and distraction (diverting attention away from the emotional content, e.g. by performing a working memory (WM) task).

Psychotherapy has been shown to be efficient and effective in reducing diverse domains of psychological problems. In the paradigms of patient-focused psychotherapy research [11], the question of efficacy and effectiveness based on pretreatment to posttreatment effect sizes was extended by attempts to investigate the change over the course of treatments using repeated

measurements. These results concerning the shape and speed of change enable predictions about therapeutic success as well as therapeutic deterioration. From the perspective of clinical application, these trajectories constitute the basis for therapy outcome monitoring or feedback systems [19]. Such systems are capable of stimulating the adaptation of therapeutic strategies towards the aim of enhancing treatment outcome. The existing studies focusing on the question of shape and speed of psychotherapeutic change offer different methods of log-linear versus linear trajectories of change according to the theoretical model [11].

2. Materials and methods

Exposure-based therapies are effective treatment approaches for posttraumatic stress disorder (PTSD) [18]. However, many patients still suffer from PTSD after treatment and treatment is associated with high dropout rates. Fear extinction is thought to be one of the mechanisms underlying the effectiveness of exposure therapies. During fear extinction a previous fear-laden stimulus is presented without aversive consequences. Thus, during extinction learning a new extinction memory trace is formed that is no longer associated with fear. However, the old fear-laden memory trace remains intact and extinguished fear responses can return [17]. Thus, recent research has focused on possible enhancers of extinction learning as they may boost the effectiveness of psychotherapy for PTSD.

Group psychotherapy

Group psychotherapy is one of the most common treatment modalities for post-traumatic stress disorder (PTSD). It is assumed that the group format in general involves a number of mechanisms that offer benefit beyond those common for the individual therapy format such as mutual support, interpersonal feedback, or altruism [25]. Especially in the treatment of PTSD, group therapy offers several advantages like the opportunity to redevelop trusting relationships, and a sense of interpersonal safety. The experience that others share similar problems helps to validate traumatic experiences and to normalize trauma responses which, in turn, decrease shame and stigma. A group setting provides support and understanding that may counteract isolation and alienation, which are often prominent in patients suffering from PTSD. Moreover, group settings may be more efficient than individual settings since it is possible to treat a larger number of patients simultaneously with less therapeutic resources. These might be reasons why group treatments are increasingly applied in healthcare settings.

Several meta-analytic reviews of psychotherapies for PTSD have been published although only a few of them separately summarize the effects of group treatments [3,7]. Those meta-analyses indicate that far more studies on group therapy for PTSD are available than what is cited in some of the above-mentioned treatment guidelines. Barrera et al. [7] summarized evidence on the efficacy of group therapy with or without in-group exposure and provided within-group effect sizes, with large pre–post effects for both conditions and no significant difference between trials using in-group exposure and those without. In a comprehensive review published by the Cochrane Collaboration, Bisson et al. [3] examined the efficacy of psychological therapies for chronic post-traumatic stress disorder combining individual and group formats. They provided a subgroup analysis for trauma-focused cognitive–behavioral group therapy compared to waitlist or usual care, respectively. Results showed large between-group effects in favor of group therapy for the severity of PTSD symptoms, both clinician-rated and self-reported.

Sloan et al. [8] provided the most comprehensive overview of the effects of group therapy on PTSD symptoms to date. They summarized 16 studies with medium effects of group therapy when compared to waitlist and no significant differences relative to active comparison conditions.

However, although PTSD was the main focus of treatment and the primary outcome measure, a formal PTSD diagnosis was not required for inclusion in this meta-analysis. Altogether, meta-analytic evidence on the efficacy of group therapy for patients with PTSD is promising but several limitations (only pre–post-effects, based on a relatively small number of studies or no requirement of a formal diagnosis) justify an updated meta-analytic review.

Accelerated Resolution Therapy

Alternative therapies may reduce overall emotional demands and readiness of patients to engage in trauma-focused psychotherapy. This may include stipulation of an anticipated brief course of treatment, one that does not require verbalization of details of traumatic experiences, and a treatment setting that does not require an established client–provider relationship. The treatment protocol of Accelerated Resolution Therapy (ART) may address some of the limitations of the most widely recommended trauma-focused psychotherapies.

Therefore, the ART protocol is described as including brief theoretical description on its potential therapeutic mechanisms, summaries the empirical research base of ART and presents new data on the use of ART for treatment of adults with symptoms of PTSD [28].

ART efficiency is conditioned by its exploitation of natural memory consolidation mechanisms. Memories undergo minor changes every time we recall them, and this activation of memory is crucial for effective PTSD therapy. There is evidence that activating memory, changing its emotional valency by introducing a new sensation or stimulus during activation and re-consolidating (“delaying”) during a discrete period of time can change memory traces at the DNA transcription level. In essence, fixing changes on an ongoing basis. " It is believed that in humans this time period, or “reconsolidation window”, is from 1 to 6 hours. Like other reconsolidation methods, the ART protocol not only suppresses the patient's fear response, but also displays disturbing emotions from actual memories of the events that created them [21].

Accelerated resolution therapy is an emerging trauma-focused psychotherapy with a solid theoretical base, and a treatment protocol that is clinically consistent with current PTSD treatment guidelines. ART provides a more streamlined, body-focused approach with an emphasis on imagery rescripting (memory reconsolidation). The research studies on ART indicate evidence of efficacy in the treatment of PTSD in a mean of approximately four treatment sessions, which is briefer than 8–12 sessions typically recommended [28].

Visual art therapy

Visual art methods can involve simply reflecting on the emotions evoked by looking at a famous painting or sculpture but typically include a creative component, ranging from various types of painting and drawing to clay work, sculpting, paper crafts, collage, and mask making [6, 14]. Therapists guide patients in the creation of directed or undirected (free association) pieces of art that express emotions, symptoms, or memories. Techniques can be catered toward specific diagnostic populations: such as depicting memory triggers for patients with trauma or hallucinations for patients with schizophrenia [14]. Simple scribble drawing or coloring techniques can be used for young children [6, 13]. Methods such as clay work and sculpting engage with a patient's tactile senses and can elicit a more visceral physical experience for the patient. Among mental disorder diagnoses, visual art therapy has been most well studied in patients with psychotic disorders. A 2016 review for patients with psychotic disorders noted that several case reports and qualitative studies demonstrated psychosocial improvements to self-esteem, self-expression, self-awareness, emotional distress, emotional wellbeing, and artistic skill as a result of creative art therapy (CAT), but that results from larger randomized control trials (RCT) have been inconclusive [5, 23].

Among mental disorder diagnoses, visual art therapy has been most well studied in patients with psychotic disorders. A review of 21 studies of Chinese calligraphy therapy including over 10,000 patients with severe mental illness reported significant improvements in targeted neuropsychiatric symptoms including anxiety, depressive, and psychotic symptoms [16].

Music therapy

Music therapy represents another one of the most commonly studied methods of CAT and can be active (patient engages in active production of music guided by the therapist) or receptive (patient listens and responds to music through methods such as lyrical analysis) [1, 15]. Genre of music and/or instrument choice is generally determined by therapist discretion and based on patient preferences, prior musical experience, and physical ability [1].

A study of psychiatric outpatients assigned to a year of weekly music therapy sessions demonstrated better adherence to drug therapy when compared to controls [9]. In a recent 13-week music therapy intervention for patients with a severe mental illness, patients reported better quality of life and increased spirituality, self-esteem, and appreciation for the intervention facilitators and co-participants by the end of treatment and also reported they would recommend the intervention to peers [10]. A study of music therapy for patients diagnosed with obsessive compulsive disorder demonstrated that music therapy was effective at reducing both obsessive symptoms and secondary symptoms of depression and anxiety. Similarly, an RCT of an active music therapy intervention for interested veterans with PTSD demonstrated a significant improvement in PTSD-specific symptoms and depression in participants as compared to a delayed-entry control [20].

Drama/theater

Despite a more limited body of literature regarding the use of drama therapy in the treatment of mental disorders, reports claim that drama therapy can combine the techniques of other types of CAT, such as dance and music, to help patients in novel ways. Moreover, the skills involved with acting have been thought to increase social functioning and empathy by requiring participants to imagine themselves as another [27]. One of the studies reviewed reported a significant decrease in negative symptoms, but not positive symptom with drama therapy [29]. Another study found that drama therapy led to significant improvement to self-esteem and feelings of inferiority [30]. It was noted in one study that active participation and enthusiasm took time to develop during the course of the study and that patients had to overcome an adjustment period before progress was made. All studies were associated with an improvement in social functioning and emotional expression by the end of intervention.

3. Discussion

Each of the above therapies helps patients with various post-traumatic stress disorders. However, much will depend on the reaction of the person himself. Which of the methods a patient will prefer (group psychotherapy or some of creative art therapy). There is also a possibility that the patient will be in a trance state some time immediately after the incident, in which case the best option would be accelerated resolution therapy.

The results show that group therapy was clearly more efficacious in reducing PTSD symptoms than what can be expected from natural recovery - with effects of medium to large size. Group therapy also significantly reduced symptoms of anxiety and depression. Treatment effects on PTSD symptoms at follow-up (up to 12 months after treatment) decreased slightly but remained significant. However, only a small number of studies provided follow-up data. Furthermore, subgroup analyses revealed that effects differed considerably depending on the presence or absence of a concurrent treatment. In some studies group therapy was provided in addition to a standard

treatment (individual therapy and/or pharmacotherapy or additional groups) which, however, was available for both intervention and control groups.

The ART protocol aligns closely with established first-line trauma focused psychotherapies and clinical guidelines. It appears to provide frequent clinical relief of symptoms of PTSD in an average of four sessions among military personnel with challenging clinical presentations, including extensive operational combat-related trauma and civil people after serious injury events.

At its best, CAT works to help patients diagnosed with mental illness to connect and communicate with themselves, their peers, their therapists, and the world in novel ways. Most types of CAT differ from traditional psychotherapeutic techniques in that the former utilize primarily nonverbal mediums of expression and all seek to stimulate healing through the therapeutic effects of creativity. CAT helps patients learn and develop artistic and/or musical talents that can increase their confidence/self-esteem, coping mechanisms, mood, cognitive functioning, and social functioning, and decrease symptoms of mental disorder diagnoses [14]. CAT can also help transform the inpatient therapeutic setting into a more comfortable or liberating environment and foster increased levels of trust in healthcare providers and their treatment plans [6]. Moreover, CAT can help turn the inpatient psychiatric hospital setting into a more welcoming and secure environment and can even incorporate family members in the treatment process and increase satisfaction with care [26].

4. Conclusion

To sum up, the empirical literature on group therapy for PTSD is growing and more large-scale studies and studies with methodological rigor have been published recently. To date, the ART protocol has not been formally studied in a head-to-head RCT against the current standard of care trauma-focused psychotherapies. In the meantime, the brevity of the ART protocol, concordance with established treatment guidelines, evolving evidence for successful treatment of PTSD overall and among complex treatment circumstances, and high provider satisfaction rates with the protocol indicate that ART may be an appropriate treatment option for PTSD. By developing and showcasing artistic talents of patients in the mental health community, CAT has been shown to help to change patient and community narratives and eliminate stigma toward mental disorder diagnoses [17]. The use of creative art therapy should maximize the involvement of the general community to increase awareness of mental health issues and establish mutually beneficial social relationships between individuals living with psychiatric conditions and the general community.

Taken together, the research on this topic increased up to the tenfold compared to the evidence summarized in some of the existing treatment guidelines.

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