



Trauma-Focused Art Therapy in the Treatment of Posttraumatic Stress Disorder: A Pilot Study

Karin Alice Schouten MATh^a, Susan van Hooren PhD^b, Jeroen W. Knipscheer PhD^c, Rolf J. Kleber PhD^c, and Giel J.M. Hutschemaekers PhD^d

^aFoundation Centre '45, Arq Psychotrauma Expert Group, Diemen/Phoenix, ProPersona, Wolfheze/Research Centre KenVak and Radboud University, Nijmegen, The Netherlands; ^bResearch Centre KenVak, Master of Arts Therapies, Open University of the Netherlands and Zuyd University of Applied Sciences, Heerlen, The Netherlands; ^cArq Psychotrauma Expert Group, Diemen and Utrecht University, Utrecht, The Netherlands; ^dProCES, ProPersona, Centre for Education and Science, Wolfheze and Radboud University, Nijmegen, The Netherlands

ABSTRACT

Research showed that more than 30% of patients with Posttraumatic Stress Disorder (PTSD) do not benefit from evidence-based treatments: Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) or Eye Movement Desensitization and Reprocessing (EMDR). These are patients with prolonged and multiple traumatization, with poor verbal memory, and patients with emotional over-modulation. Retelling traumatic experiences in detail is poorly tolerated by these patients and might be a reason for not starting or not completing the recommended treatments. Due to lack of evidence, no alternative treatments are recommended yet. Art therapy may offer an alternative and suitable treatment, because the nonverbal and experiential character of art therapy appears to be an appropriate approach to the often wordless and visual nature of traumatic memories. The objective of this pilot study was to test the acceptability, feasibility, and applicability of trauma-focused art therapy for adults with PTSD due to multiple and prolonged traumatization (patients with early childhood traumatization and refugees from different cultures). Another objective was to identify the preliminary effectiveness of art therapy. Results showed willingness to participate and adherence to treatment of patients. Therapists considered trauma-focused art therapy feasible and applicable and patients reported beneficial effects, such as more relaxation, externalization of memories and emotions into artwork, less intrusive thoughts of traumatic experiences and more confidence in the future. The preliminary findings on PTSD symptom severity showed a decrease of symptoms in some participants, and an increase of symptoms in other participants. Further research into the effectiveness of art therapy and PTSD is needed.

ARTICLE HISTORY

Received 15 May 2017 Accepted 10 April 2018

KEYWORDS

PTSD; art therapy; protocol; trauma-focused; feasibility

After violence, war, disaster, or other potentially traumatic events, serious symptoms may arise, such as avoidance of reminders, emotional numbness or dissociation, hyper-arousal, and re-experiencing of traumatic events in

flashbacks and nightmares. When several of these symptoms persist for more than one month, the diagnosis of Posttraumatic Stress Disorder (PTSD) may be applicable (American Psychiatric Association, 2000, 2013).

According to multidisciplinary guidelines (Foa, Keane, Friedman, & Cohen, 2009; Forbes et al., 2010; National Collaborating Centre for Mental Health, 2005), effective treatments for PTSD are Eye Movement Desensitization and Reprocessing (EMDR) and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). However, according to Bradley, Greene, Russ, Dutra, and Westen (2005), more than 30% of the patients do not benefit from these treatments. These are frequently patients with prolonged and multiple traumatization (Robertson, Humphreys, & Rey, 2004; Spinazzola, Blaustein, & van der Kolk, 2005), poor verbal memory (Wild & Gur, 2008), and/or emotional over-modulation, such as dissociative and numbing symptoms (Lanius et al., 2010). For these patients, no alternative evidence-based treatments are available yet (Bisson et al., 2007; Jonas et al., 2013). Exploration of alternative and adjunctive therapeutic interventions is necessary to improve outcomes (Gapen et al., 2016). Art therapy, the therapeutic use of art making, may offer an appropriate treatment for these patients.

Art therapy is defined as a treatment in which patients, facilitated by the art therapist, use art materials, the creative process, and the resulting artwork to explore their emotions, foster self-awareness, reduce anxiety, and increase self-esteem (American Art Therapy Association, 2014). The visual and tangible characteristics of art therapy in PTSD treatment appear to be consistent with the often wordless, image-based, sensory-perceptual nature of traumatic memories (Ehlers, Hackmann, & Michael, 2004; Herman, 1992; Holmes & Bourne, 2008; van der Kolk, 1994). It is posited that art making in art therapy may provide relaxation and decrease of arousal (Collie, Backos, Malchiodi, & Spiegel, 2006). It may also provide a more gradual access to traumatic as well as positive memories and emotions, and therefore reduces avoidance (Collie et al., 2006). According to art therapy experts, it enables patients to express and externalize memories and emotions in visual art and to connect implicit and explicit memory (Collie et al., 2006; Malchiodi, 2012; Smeijsters, 2008).

Based on expert opinions and preliminary research, a trauma-focused art therapy protocol has been developed (see Schouten, De Niet, Knipscheer, Kleber, & Hutschemaekers, 2015). The art therapy protocol consists of three phases. The first phase of the protocol is directed to stabilization and symptom reduction, the second phase is trauma-focused, and the third phase is directed to integration and meaning-making. Although the first phase of the art therapy protocol is called stabilization and symptom reduction, the purpose goes beyond stabilization and focuses also on decreasing avoidance and accessing traumatic memories, as a form of progressive exposure. Art therapy, as non-verbal and experiential treatment, addresses images rather than words, and offers a different kind of access to traumatic

memories and emotions than verbal treatments. This may offer treatment alternatives for patients who are unable to talk about traumatic memories and unable to tolerate exposure treatments. Especially for patients with multiple and prolonged traumatization, such as patients with early childhood traumatization and refugees and asylum seekers from different cultural backgrounds, art therapy could bridge the gap across barriers of language and culture (Schouten, 2010; Wertheim-Cahen, van Dijk, Schouten, Roozen, & Drodek, 2004).

Art therapy is not yet an evidence-based treatment. Various experts describe good results using art therapy for treatment of PTSD (Avrahami, 2005; Baker, 2006; Collie et al., 2006; Lobban, 2014; Wertheim-Cahen, 2007) and art therapy is often applied in clinical settings offering PTSD treatment. Qualitative research showed consensus among experts on the core elements of art therapy in accessing traumatic memories and emotions, increasing emotional control, strengthening self-esteem and a sense of autonomy (Collie et al., 2006; Torstenson, 2006). However, its effectiveness has not been sufficiently tested. A systematic review showed that there are indications that art therapy can be effective in reducing PTSD symptoms (avoidance, arousal, and re-experiencing) and in reducing depression (Schouten et al., 2015), but more empirical inquiries are needed (Foa et al., 2009).

The aim of this pilot study was to explore the feasibility and acceptability of a trauma-focused art therapy protocol as treatment for adult patients with PTSD and to identify the preliminary results of the treatment in decreasing PTSD symptom severity. The secondary aim of the study was to identify treatment adherence by measuring dropout and no-show rates.

Method

In this study, twelve PTSD patients were offered a trauma-focused art therapy treatment of eleven sessions, in which experiences of both patients and therapists were followed. In pilot studies where no prior information is available about implementability, effectiveness, and adherence to treatment, a sample size of a minimum of 12 cases is recommended (Julious, 2005). The study was approved by the Committee on Medical Ethics of Leiden University Medical Centre.

Setting and sample

Patients were included when they met the following inclusion criteria: patients of 18 years and older, with a PTSD diagnosis according to DSM IV, as result of one or more traumatic events and with an indication for individual ambulant treatment. Patients were excluded from participation when they met one or more of the following exclusion criteria: psychotic disorder; start or change in medication in the last two months; active substance dependence or abuse, or remission from substance dependence for less than three months; severe depression; suicidality or acting-out behavior.

Patients were registered for treatment at the Dutch national centre for diagnostics and treatment of people with (complex) psychotrauma disturbances. Patients were six refugees and asylum seekers from several countries, with PTSD as a result of long-term and multiple traumatic experiences due to violence and war as well as three adults with early childhood traumatization. Diagnoses were assessed during the intake procedure by psychiatrists and psychologists.

Patients waiting for PTSD treatment who met the inclusion criteria were selected, in order of the waiting list, for participation in the study. Participants were recruited from September 2013 until March 2014. Thirteen patients who met the inclusion criteria were informed (written and oral) about trauma-focused art therapy and the study. One patient declined to participate in the study, because he preferred EMDR treatment. Twelve of the thirteen patients agreed to participate. After agreement and signing the informed consent, they were referred to the trauma-focused art therapy by the psychiatrist or psychotherapist.

Demographic data

Demographic information was collected from the intake reports: gender, age, education, medication, previous treatment, previous art therapy treatment, comorbidity, language and country of origin, number of traumatic experiences and time of trauma.

Characteristics of the participants are presented in Table 1. The participants originated from Russia (3), Iraq (2), Bosnia (2), Iran (1), Congo (1), Afghanistan (1), Ireland (1) and the Netherlands (1). The native languages of the participants were Russian, Arabic, Bosnian, Farsi, Luganda, Dari, English and Dutch. Ten participants were refugees, one participant was Dutch and one was British.

Intervention

Based on expert opinions and preliminary research, a trauma-focused art therapy protocol has been developed by the first author in collaboration with the other authors (see Schouten et al., 2015). It is a short-term traumafocused individual treatment for adult patients with PTSD. The protocol with eleven weekly sessions of 60 min, consists of three phases, as is often customary in the treatment of complex traumatization (Cloître et al., 2012; Mooren & Stöfsel, 2015). The first phase of the protocol is focused on stabilization and symptom reduction, although some attention is already



Table 1. Demographic and general data of participants.

	Total group including dropouts	Study sample: patients who completed the treatment
Total number participants	12	9
% Male	58	67
Mean age (in years)	46	49
Education		
Only primary school	1	1
Only secondary education	5	3
Secondary vocational education	1	1
Higher education or university	5	4
% On medication	58	56
Previous treatment	11	9
Previous art therapy	1	1
PTSD without comorbidity	1	0
Comorbidity (depression)	10	8
Comorbidity with posttraumatic grief	1	1

paid to decreasing avoidance and accessing traumatic memories. The second phase is trauma-focused (exposure), and the third phase is focused on integration and meaning-making.

Phase I. Stabilization and symptom reduction

The first phase consists of four sessions focused on the present. Art therapy in this phase is focused on reducing stress and arousal and increasing a sense of control. Interventions are: creating a safe place (drawing or collage); collage of positive images; (observational) drawing a positive image (nature, landscape); drawing and coloring a geometric pattern or mandala. Also, the focus is to enable access to traumatic memories as well as good memories. In the last session of this phase, the client is asked to make a list of five items related to memories. The list should include both positive and traumatic memories. Finally, the art therapist assesses whether the client has sufficient stability and motivation to continue with the next phase of trauma processing. Sufficient stability and motivation were determined based on the following criteria: the patient is able to make the list of positive and traumatic memories, the patient is at least willing to express positive and traumatic memories and the patient is not emotionally overwhelmed by the idea of expressing memories and emotions. In case of doubt, the art therapist consulted the psychiatrist or psychologist.

Phase II. Trauma-focused

The second phase is trauma-focused and consists of five sessions (session 5-9) focused on present and past. Art therapy is now focused on access and expression of traumatic and positive memories. In each of the five sessions, the patient is asked to express a traumatic or a positive memory (following

the list of items from session four) in an artwork (drawing, painting, collage). In this phase, no more than two traumatic memories should be expressed. The sessions in which a traumatic memory is visualized in artwork end with an art therapeutic exercise focused on relaxation, in order to regain control. In the last session of this phase, a positive memory should be expressed in artwork in preparation for the third phase and end of the treatment.

Phase III. Integration and meaning-making

The phase of integration and meaning-making consists of two sessions (session 10-11) and is focused on past, present, and future. This phase involves reorganization, integration, and farewell. Memories and emotions expressed in artwork in the previous phases are reordered and merged into a new artwork that includes future perspectives.

The art therapy treatment was performed by four art therapists with a bachelor- or master in art therapy, a valid professional registration for art therapists, and more than 11 years of experience with adult PTSD patients. In addition, two psychiatrists and one psychotherapist participated with one monitoring session after the fifth session of the art therapy protocol. The focus in this session was on here and now, on PTSD symptoms and on psycho-education. The aim of this monitoring session was to control medication and stability, in order to avoid risks in this pilot study. In consultation with the art therapist, the psychiatrist or psychologist assessed whether the patient was stable enough to (continue) participating in the research and whether medication changes were necessary. The psychiatrist or psychologist could decide to start medication or change of medication, or to withdraw a participant from the study for urgent medical reasons.

Measures

Adherence to treatment

Treatment adherence to the art therapy protocol was measured with an attendance-related checklist. It consisted of two questions: 1) was the client present or absent? (no-show) and 2) did the patient prematurely terminate the therapy (dropout)? This checklist was completed by the art therapist after each session.

Feasibility and applicability

Feasibility and applicability were measured using a questionnaire for art therapists and psychiatrists. This questionnaire, developed by the first author, consisted of two parts. Part A included questions on the description and applicability of the protocol and was completed by psychiatrists and art therapists directly after finishing the last session. Part B consisted of questions about applicability, feasibility, and duration of art therapy and was completed by the art therapists directly after the last session.

In addition, feasibility and applicability according to patient reports were measured. After each art therapy session, the art therapists wrote reports of what the patients expressed about the treatment. From these reports, data were collected on treatment satisfaction and perceived results reported by patients on their own initiative, or when the therapist asked them about their experiences.

PTSD symptom severity

PTSD symptom severity was measured using part IV of the Harvard Trauma Questionnaire (HTQ) (Mollica et al., 1996; in Dutch translated by Kleijn, Hovens, & Rodenburg, 2001), prior to treatment and immediately after the last session of treatment. The HTQ-Part IV of the original list consists of 30 items on PTSD: 16 items are derived from the DSM-IV criteria for PTSD. In this study, patients were asked to indicate how much difficulty they have experienced over the last week on each of the 16 items using a 4-point scale ranging from not at all to very much.

The questionnaire was administered in the patient's native language if possible. Next to the Dutch version, the HTQ- IV was available in English, Arabic, Farsi, Serbo-Croatian, Russian, and English. Professional interpreters were used when necessary, as is customary when administering questionnaires to traumatized refugees and asylum seekers (Ter Heide, Mooren, Kleijn, de Jongh, & Kleber, 2011). The original version of the HTQ has been validated (Mollica et al. 1992). The reliability of the Dutch translation is good; Cronbach's alpha is between .80 and .90 (Kleijn et al., 2001). The psychometric properties of the additional translations of the HTQ made in Arabic, Farsi, Serbo-Croatian, Russian, and English bilingual HTQ have been found adequate for these cultures and in general applicable to measure symptoms of posttraumatic stress disorder (Kleijn et al., 2001).

Procedure

Before the first session of the art therapy protocol, participants completed the HTQ. In the protocolized art therapy treatment, participants were offered eleven one hour long, weekly art therapy sessions. After five sessions, patients attended a monitoring session of 50 min with a psychiatrist or psychotherapist. After the last art therapy session, participants completed the HTQ.

Results

Adherence to treatment

From 13 patients who were informed about the art therapy protocol, one client was not willing to participate. There was a high willingness to participate as evidenced by the 94% participation rate, although most participants (n = 11) had not received art therapy before. Three of the 12 participants ended treatment prematurely. None of the patients ended treatment because of dissatisfaction with treatment or increase of symptoms. One client ended treatment because he wanted a medication change, another client preferred treatment at another institution, and the third client was not allowed to stay in the Netherlands. Willingness to complete treatment was considered acceptable with a dropout proportion of 25%. With an average no-show percentage of 9.48%, the adherence to treatment was also considered acceptable. One participant had a much higher no-show rate (45.45%) due to concurrent stress. Five participants were present at all sessions.

Feasibility and applicability

Both psychiatrists and art therapists considered the treatment protocol feasible and applicable. In the first part of the protocol checklist (Part A), art therapists and psychiatrists considered the written art therapy protocol clear and fully developed as well as feasible in clinical practice. Inclusion and exclusion criteria were clearly described.

In the second part of the checklist (part B), the art therapists indicated that the protocol was suitable to their knowledge and experience and to the capabilities of patients. They had a few comments on the second phase. A more explicit explanation of the number of traumatic and positive memories was needed, because all participants had many traumatic experiences. Within the time of the protocol, it was necessary to limit exposure to one or two traumatic experiences. Also, more instructions for art therapeutic relaxation exercises were considered necessary, in order to reduce high tension (in some participants) after exposure to a traumatic memory. The experience of the art therapists was, in general, that the protocol provided clear instructions, it gave the therapists a lot of direction in what they had to do in the different sessions. Some art therapists indicated that they needed more time and some therapists indicated that follow-up treatment was needed after the traumafocused art therapy.

Perceived results and treatment satisfaction

In their patient reports, patients reported treatment satisfaction and perceived improvements, such as decreased stress, more relaxation, less worrying, fewer intrusive thoughts, and increased ability to look more confidently toward the future. One of the art therapists reported that the patient told at the end of the treatment: "that the art therapy was good for him. He has discovered that he wanted to leave the negative images behind him and to focus on hope for the future. He felt better after treatment compared to the period before treatment."

Furthermore, patients mentioned that they were able to express their emotions and memories in art making and to share memories and emotions that they had never shared before. One art therapist reported the following experience of a participant: " He made a kind of obelisk with death heads around it. He was not able to talk about it, he never has shared this with anyone before. In the art therapy he was able to share this emotional memory without words."

Also, some patients were able to express emotions of grief and loss by creating a symbolic artwork. "Making a small clay statue of his most intrusive memory: a small child that died in his arms, was very heavy for him and raised feelings of sadness, anger, and powerlessness. During the therapy, it became less heavy. In the last session, he wraps the statue of the dead child in, according to the customs of his culture, and puts it in a small box. Expressing himself in art therapy felt better than talking alone. The patient reported that the boy who died in his arms is less often in his mind."

PTSD symptom severity

Preliminary findings of the measures of PTSD symptom severity using the HTQ16, showed some reduction of avoidance and arousal among individual participants (Table 2).

The individual measures showed a decrease of PTSD symptoms in five participants. Two of these participants showed a decrease across all measures (avoidance, arousal end re-experiencing). Both participants had their first traumatic experience seven years ago and experienced four traumatic events. Increased PTSD symptom severity was measured in four participants: these were three participants with PTSD as result of early childhood traumatization (with more than seven traumatic experiences and onset of traumatization 43, 48 and 46 years ago) and in one participant suffering from PTSD with severe

Table 2. Individual scores, means, and standard deviations of treatment completers HTQ-16: PTSD, Arousal, Avoidance, Re-experiencing.

	PTSD		Avoidance		Arousal		Re-experiencing	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
1.	2.81	2.75	2.71	2.28	3.00	3.20	2.75	3.00(
2.	3.06	2.75	2.57	2.14	3.60	3.20	3.25	3.25
3.	2.19	2.38	2.14	2.28	2.20	2.40	2.25	2.50
4.	3.25	2.56	3.12	2.57	2.80	2.40	4.00	3.00
5.	2.13	1.63	2.14	1.57	2.00	1.40	2.25	2.00
6.	3.13	3.56	3.00	3.42	3.40	3.40	3.00	4.00
7.	3.56	3.06	3.43	2.71	3.60	3.80	3.75	3.00
8.	2.81	3.31	2.71	3.57	2.80	3.20	3.00	3.00
9.	3.13	3.19	3.12(3.28	3.40	3.20	2.75	3.00
Total	2.89(0.44)	2.79(0.54)	2.77(0.42)	2.65(0.63)	2.97(0.55)	2.91(0.68)	3.00(0.57)	2.97(0.51)

Bold font: decrease of symptoms; regular font: increase of symptoms; gray: no changes

actual stressors. The art therapist reported: "His complaints from many traumatic experiences in the past, in conjunction with fear and uncertainty about the future (asylum procedure and the judgment of the court), gave him a lot of despair and tension. He was not able to focus his attention on his memories."

Decrease of avoidance was found among five participants, while four participants showed an increase in avoidance. Increase of avoidance was found in one of the participants with PTSD due to early childhood traumatization. His art therapist described: "In his drawings he expressed the memory when he heard that his mother had abandoned him because he was an unwanted child. He also expressed his feelings of loneliness, of not being a part of this world. Next to this feelings of depersonalization, he told about the defragmentation in the images in his dreams: without a narrative structure."

Another art therapist reported about a patient, an asylum seeker from Armenia, who showed an increase of avoidance: "Due to his distress, he was not able to complete the list of memories. He made an artwork as a commemoration for a friend who was killed. He was the only witness of this murder and felt guilty of the death of his friend. Although some art therapy interventions (such as painting water and air) gave him some relaxation and distraction from ruminating, expressing his emotional memories was very difficult for him."

Decrease of avoidance and decrease of PTSD symptom severity was found in one of the participants, a 53-year-old female, who experienced more than seven traumatic events, the first one 12 years ago. She had a good life until her husband died and her daughter was raped. At the beginning of the art therapy, she suffered from a lot of stress and anxiety. The art therapist described: "In a diptych in the art therapy she expresses with black torn paper how everything was black and broken in the past, next to a green tree, symbolizing her hope for the future. In the last sessions, she rearranges the images and experiences from the art therapy, leaving anxiety in the part of the past, and imaging her hope and wishes for a better future."

Two participants showed a decrease of PTSD symptom severity (avoidance, arousal, and re-experiencing). The art therapist reported on one of this participants: "His most severe traumatic experience is the death of his son. In a triptych, he draws a symbolic landscape of his life story. In the part of the past a brightcolored mountain represents his good memories, a small dark mountain represents the time after the death of his son. A flat black-colored mountain shows his feelings of sadness and grief in the present. In the third part, he shows how he sees the future: three small mountains with a question mark. In the last session, he adds images of good memories and positive images of the future together. He decided that he wants to leave the negative images behind him and focus his hope on the future. He is glad that he could discover this in the art therapy and he feels better now than before the therapy."

About the other participant who showed a decrease in all PTSD symptoms, one of the art therapists reported: "In the art therapy, participant # 5 expresses several traumatic memories (refugee-camp, flight to the Netherlands, fire in the pharmacy and good memories of a street in his country of origin. At the start of the art therapy he is very busy, in a hurry, he wants to do a lot and he wants to do everything quickly. At the same time he is afraid that he is not doing well enough. Also in daily life he always does more than is expected and he wants to do it as well as possible. As a result he is always too tired. In the art therapy he discovers that drawing with colours helps hem to become calmer. At the end of the art therapy he decided to merge only the positive memories in a new artwork. He photographs this images, so he can look at is if he feels tense. Participant is satisfied about the art therapy, he has experienced the therapy as pleasant, and generally feels calmer."

According to the measures, four participants had decreased arousal, four participants had increased arousal and one participant had no changes in arousal. Decrease of re-experiencing was measured among three participants; while four participants demonstrated increased re-experiencing, and two participants demonstrated no change in re-experiencing (Table 2). For patients who had no decrease of symptom severity, more time and follow-up treatment is needed after the trauma-focused art therapy, as indicated by the art therapists.

Discussion

The objective of this pilot study was to test the feasibility and applicability of trauma-focused art therapy in clinical practice. Participants were adults with PTSD due to multiple and prolonged traumatization, such as patients with early childhood traumatization and refugees and asylum seekers from different cultural backgrounds.

The results indicate that trauma-focused art therapy is acceptable and feasible, as shown by willingness to participate and treatment adherence, with a dropout rate of 25% and an average no-show rate of 9,48%. According to the protocol checklist, both art therapists and psychiatrists considered the protocol feasible and applicable as well as fitting with their professional skills and the capabilities of the patients. Patient reports showed that patients in general reported treatment satisfaction and improvements after treatment.

Preliminary findings of measures of PTSD symptom severity showed a decrease of symptoms in some participants, and an increase of symptoms in other participants. The increase of symptoms was measured in three participants with a long-term history of traumatization (with an onset of traumatization 43, 48, and 46 years ago), many traumatic experiences (more than seven), comorbidity with severe depression as well as

personality disorder, and exposure to recent acute stressors. These three patients had much more traumatic experiences and a much longer history of traumatic experiences than the other patients (who experienced four to seven traumatic events, with an onset of traumatization less than 12 years ago). Consequently, increased PTSD symptom severity might be due to the multitude of traumatic experiences, the number of years in which traumatic experiences occurred, the (young) age at which traumatic experiences occurred and the severity of these traumatic experiences. Also, severe actual stressors might contribute to increase of PTSD symptom severity. However, decrease in the severity of one or more PTSD symptoms (avoidance, arousal, re-experiencing) was measured in six of the nine participants who completed treatment.

Participants with decrease of PTSD symptom severity were refugees and asylum seekers. Although these clients in our study are not different from the majority of trauma clients regarding multiple (and long-term) traumatization), their experiences as asylum seekers and refugees have a huge and profound impact. Therefore, it is necessary to pay ample attention to the complex backgrounds of refugees and asylum seekers. In that sense, these backgrounds make them different: having to flee from their own country, losing their own culture, adapting to a new country and culture, experiencing traumatic loss of family and relatives, forcing to be witness of assault, rape or murder of family and friends, as well as imprisonment and torture. Furthermore, they often had to spend many years in asylum centers, sometimes more than 10 years, in constant uncertainty of being sent back to their country where they had to fear for their lives.

Decrease of PTSD symptom severity might be due to the following aspects of the art therapy protocol: art therapy may help to decrease avoidance by providing concretized forms of representation (visual and tactile) in visual artwork (Foa et al., 2009). Active art making provides a sense of control and autonomy (Wertheim-Cahen, 2007). In art therapy, patients can express experiences non-verbally, without the need to talk about it in detail (Wertheim-Cahen, 2007). Also, in the art therapy protocol participants could face images of the story of their life, and this may help them to decide to leave the past behind and focus on future perspectives.

Although these changes were small, this appears to be consistent with the findings of Collie and colleagues (2006) who reported that relaxation in art therapy reduces arousal and offers a safe and gradual access to traumatic memories, thus enabling the patient to overcome avoidance and to endure exposure. Also, findings of a systematic review show that art therapy can be effective in reducing PTSD symptoms (avoidance, arousal, and re-experiencing) and in reducing depression (Schouten et al., 2015).

The art therapy protocol consists of three phases: stabilization and symptom reduction; trauma-focused; and integration and meaning-making. In recent studies, several experts have doubted the need for a separate stage of stabilization in preparation for trauma-focused treatment for patients with complex PTSD (Bicanic, De Jongh, & Ten Broeke, 2015; De Jongh et al., 2016; Ter Heide, Mooren, & Kleber, 2016). On the other hand, experts have also argued for a wide variety of treatments, including phased treatments, to match the needs and capabilities of different patients (Cloître, 2016).

In a meta-analysis of dropout in PTSD treatment (Imel, Laska, Jakupcak & Simpson, 2013) exposure-based therapies in which the patient has to retell traumatic memories in detail were found to be especially unacceptable and poorly tolerated by patients. In many reviews of PTSD efficacy studies, moderate to high dropout rates have been reported (Nosè et al., 2017; Tran & Gregor, 2016). A comprehensive study with traumatized asylum seekers and refugees reported a dropout rate of 50% in EMDR as well as in stabilization treatment (Ter Heide et al., 2016, 2011). High dropout numbers (68%) were also reported in a study on Cognitive Behavioral therapies with Iraqi and Afghani war veterans (Garcia, Kelley, Rentz, & Lee, 2011). It seems plausible that patients with multiple and long-term traumatization (Robertson et al., 2004; Spinazzola et al., 2005) do not complete the full course of the recommended treatments because they may be unable to tolerate the retelling of traumatic memories in detail. In this pilot study, dropout (25%) was lower than those reported in studies on the treatment of PTSD in combination with comorbidity (37%-62%) (Spinazzola et al., 2005).

The number of completers (75%) and low no-show rate (9.48%) in this study suggests that the non-verbal character of trauma-focused art therapy may be more acceptable and better tolerated by patients.

Limitations

Limitations of the study are the small sample size, absence of control conditions and lack of follow-up measurement. Due to the small sample size, the preliminary findings have to be considered as a first impression and have to be interpreted with caution (Lancaster, Dodd, & Williamson, 2004). Another restriction is that only refugees and adults with early childhood traumatization participated, but no other patient groups such as veterans. Broadening the study population to include other populations exposed to traumatic events, would provide more insight into which patient groups benefit from art therapy. Another limitation is that only satisfaction and applicability disclosed by patients as recalled by the therapists is mentioned in this study. Asking the patients directly how they experienced the treatment with a satisfaction questionnaire, would have provided important additional information.



Implications

This study has implications for clinical practice as well as for research.

Traumatized patients may benefit from trauma-focused art therapy, because it "can address avoidance through progressive exposure, in symbolic form, to stimuli that are being avoided and to emotions associated with these stimuli. Generally, it is less threatening to express and reveal traumatic material non-verbally than verbally, because the level of symbolism can be more easily modulated" (Collie et al., 2006). The less threatening non-verbal exposure in art therapy might decrease arousal and avoidance, and might contribute to compliance and completing treatment. Treatment adherence in trauma-focused art therapy in this pilot study appeared to be larger than reported in other studies on similar patient populations.

For some patients, art therapy may be an appropriate alternative treatment, and for most other patients art therapy might be promising as an initial treatment in preparation for other trauma-focused treatments (such as EMDR, TF-CBT or Narrative Exposure Therapy (NET)).

Conclusion

This study is the first pilot study on acceptability, feasibility, and applicability of trauma-focused art therapy for PTSD treatment among adult patients. The protocolized art therapy was considered acceptable, feasible, and applicable as an initial individual outpatient treatment for adult patients suffering from PTSD as a result of long-term and multiple traumatization. Patients were refugees and asylum seekers from several cultures and adult patients with early childhood traumatization. The experiential and non-verbal approach of trauma-focused art therapy might help to overcome avoidance, to decrease arousal and to enable access to traumatic memories and emotions for those patients who have difficulties to talk about their traumatic experiences. Although adherence to treatment and treatment satisfaction of participants were good, preliminary measures showed that PTSD symptom severity decreased in some patients but increased in some other patients. For almost all patients follow-up treatment was needed. Also, research into the effectiveness of art therapy with a larger sample size and a control group is recommended.

Acknowledgments

Grateful thanks to the patients, art therapists, psychiatrists, and psychologists who participated. Special thanks to Leslie Snider, MD, MPH for her editing suggestions.



Funding

Preparation of this manuscript was supported by Arq Psychotrauma Expert Group, Diemen and ProCES, ProPersona, Centre for Education and Science.

References

- American Art Therapy Association (2014, December 15). Retrieved from http://www.artther
- American Psychiatric Association (APA). (2000). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: American Psychiatric Association.
- American Psychiatric Association (APA). (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: American Psychiatric Association.
- Avrahami, D. (2005). Visual art therapy's unique contribution in the treatment of posttraumatic stress disorders. Journal of Trauma and Dissociation, 6(4), 5-38.
- Baker, B. A. (2006). Art speaks in healing survivors of war: The use of art therapy in treating trauma survivors. Journal of Aggression, Maltreatment & Trauma, 12(1-2), 183-193. doi:10.1300/J146v12n01_10
- Bicanic, I. A. E., De Jongh, A., & Ten Broeke, E. (2015). Stabilisatie in traumabehandeling bij complexe PTSS: Noodzaak of mythe? Tijdschrift Voor Psychiatrie, 57, 332-339.
- Bisson, J. I., Ehlers, A., Matthews, R., Pilling, S., Richards, D., & Turner, S. (2007). Psychological treatments for chronic post-traumatic stress disorder: Systematic review and meta-analysis. British Journal of Psychiatry, 2, 97-104. doi:10.1192/bjp.bp.106.021402
- Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional metaanalysis of psychotherapy for PTSD. American Journal of Psychiatry, 162, 214-227. doi:10.1176/appi.ajp.162.2.214
- Cloître, M. (2016). Commentary on De Jongh et al. (2016) Critique on ISTSS Complex PTSD guidelines: Finding the way forward. Depression and Anxiety, 33, 355-356. doi:10.1002/ da.22493
- Cloître, M., Courtois, C. A., Ford, J. D., Green, B. L., Alexander, P., Briere, J., & van der Hart, O. (2012). The ISTSS expert consensus treatment guidelines for complex PTSD in adults. Retrieved from https://www.istss.org/ISTSS_Main/media/Documents/ISTSS-Expert-Concesnsus-Guidelines-for-Complex-PTSD-Updated-060315.pdf
- Collie, K., Backos, A., Malchiodi, C., & Spiegel, D. (2006). Art therapy for combat related PTSD: Recommendations for research and practice. Art Therapy, 23, 157-164. doi:10.1080/ 07421656.2006.10129335
- De Jongh, A., Resick, P. A., Zoellner, L. A., van Minnen, A., Lee, C. W., Monson, C. W., & Bicanic, I. A. E. (2016). A critical analysis of the current treatment guidelines for complex PTSD in adults. Depression and Anxiety, 33, 359-369. doi:10.1002/da.22469
- Ehlers, A., Hackmann, A., & Michael, T. (2004). Intrusive re-experiencing in post-traumatic stress disorder: Phenomenology, theory, and therapy. Memory, 12, 403-415. doi:10.1080/ 09658210444000025
- Foa, E. B., Keane, T. M., Friedman, M. J., & Cohen, J. A. (2009). Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies (2nd ed.). New York: Guilford Press.
- Forbes, D., Creamer, M., Bisson, J., Cohen, J., Crow, B., Foa, E., ... Ursano, R. (2010). A guide to guidelines for the treatment of PTSD and related conditions. Journal of Traumatic Stress, 23(5), 537-552. doi:10.1002/jts.20565



- Gapen, M., van der Kolk, B. A., Hamlin, E., Hirshberg, L., Suvak, M., & Spinazzola, J. (2016). A pilot study of neurofeedback for chronic PTSD. Applied Psychophysiology and Biofeedback, 41, 251-261. doi:10.1007/s10484-015-9326-5
- Garcia, H. A., Kelley, L. P., Rentz, T. O., & Lee, S. (2011). Pretreatment predictors of dropout from cognitive behavioral therapy for PTSD in Iraq and Afghanistan war veterans. Psychological Services, 8(1), 1–11. doi:10.1037/a0022705
- Herman, J. L. (1992). Trauma and recovery. New York: Basic Books.
- Holmes, E. A., & Bourne, C. (2008). Inducing and modulating intrusive emotional memories: A review of the trauma film paradigm. Acta Psychologica, 127(3), 553-566. doi:10.1016/j. actpsy.2007.11.002
- Imel, Z. E., Laska, K., Jakupcak, M., & Simpson, T. L. (2013). Meta-analysis of dropout in treatments for posttraumatic stress disorder. Journal of consulting and clinical psychology, 81(3), 394.
- Jonas, D. E., Cusack, K., Forneris, C. A., Wilkins, T. M., Sonis, J., Middleton, J. C., Feltner, C., Meredith, D. M., Cavanaugh, J., Brownley, K. A., Olmsted, A., Greenblatt, K. R., Weil, A., & Gaynes, B. N. (2013). Psychological and pharmacological treatments for adults with posttraumatic stress disorder (PTSD). Comparative Effectiveness Reviews, 92. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK137702/website
- Julious, S. A. (2005). Sample size of 12 per group rule of thumb for a pilot study. Pharmaceutical Statistics, 4(4), 287-291. doi:10.1002/(ISSN)1539-1612
- Kleijn, W. C., Hovens, J. E., & Rodenburg, J. J. (2001). Posttraumatic stress symptoms in refugees: Assessments with the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist-25 in different languages. Psychological Reports, 88(2), 527-532. doi:10.2466/ pr0.2001.88.2.527
- Lancaster, G. A., Dodd, S., & Williamson, P. R. (2004). Design and analysis of pilot studies: Recommendations for good practice. Journal of Evaluation in Clinical Practice, 10(2), 307-312. doi:10.1111/j.2002.384.doc.x
- Lanius, R. A., Vermetten, E., Loewenstein, R. J., Brand, B., Schmahl, C., Bremner, J. D., & Spiegel, D. (2010). Emotion modulation in PTSD: Clinical and neurobiological evidence for a dissociative subtype. American Journal of Psychiatry, 167, 640-647. doi:10.1176/appi. ajp.2009.09081168
- Lobban, J. (2014). The invisible wound: Veterans' art therapy. International Journal of Art Therapy: Formerly Inscape, 19(1), 3-18. doi:10.1080/17454832.2012.725547
- Malchiodi, C. A. (2012). Art therapy and the brain. In C. A. Malchiodi (Ed.), Handbook of art therapy (2nd ed., pp. 17-24). New York: Guilford Press.
- Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The Harvard Trauma Questionnaire: validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. Journal of Nervous and Mental Disease.
- Mollica, R. F., Caspi-Yavin, Y., Lavelle, J., Tor, S., Yang, T., Chan, S., ... De Marneffe, D. (1996). The Harvard Trauma Questionnaire (HTQ): Manual for use with Cambodian, Lao and Vietnamese versions. Torture, 6, 5-21.
- Mooren, T., & Stöfsel, M. (2015). Diagnosing and treating Complex Trauma. London: Routledge.
- National Collaborating Centre for Mental Health. (2005). Post-traumatic stress disorder: The management of PTSD in adults and children in primary and secondary care. Clinical Guideline 26. London, UK: National Institute for Clinical Excellence.
- Nosè, M., Ballette, F., Bighelli, I., Turrini, G., Purgato, M., Tol, W., ... Corrado, B. (2017). Psychosocial interventions for post-traumatic stress disorder in refugees and asylum



- seekers resettled in high-income countries: Systematic review and meta-analysis. PLoS ONE, 12(2), e0171030. doi:10.1371/journal.pone.0171030
- Robertson, M. F., Humphreys, L., & Rey, R. (2004). Psychological treatments for posttraumatic stress disorder: Recommendations for the clinician based on a review of the literature. Journal of Psychiatric Practice, 10, 106-118.
- Schouten, K. A. (2010). Vaktherapie. In J. De Jong & S. Colijn (Eds.), Handboek Culturele Psychiatrie en Psychotherapie [Handbook of cultural psychiatry and psychotherapy]. Utrecht: De Tijdstroom.
- Schouten, K. A., De Niet, G. J., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. M. (2015). The effectiveness of art therapy in the treatment of traumatized adults: A systematic review on art therapy and trauma. Trauma, Violence and Abuse., 16, 220-228. doi:10.1177/1524838014555032
- Smeijsters, H. (2008). Handboek Creatieve Therapie [Handbook of creative arts therapies]. Bussum, The Netherlands: Uitgeverij Coutinho.
- Spinazzola, J., Blaustein, M., & van der Kolk, B. A. (2005). Posttraumatic stress disorder treatment outcome research: The study of unrepresentative samples? Journal of Traumatic Stress, 18(5), 425-436. doi:10.1002/jts.20050
- Ter Heide, F. J. J., Mooren, T. M., & Kleber, R. J. (2016). Complex PTSD and phased treatment in refugees: A debate piece. European Journal of Psychotraumatology, 7, 28687. doi:10.3402/ejpt.v7.28687
- Ter Heide, J. J., Mooren, G. T. M., Kleijn, W., de Jongh, A., & Kleber, R. J. (2011). EMDR versus stabilisation in traumatised asylum seekers and refugees: Results of a pilot RCT. European Journal of Psychotraumatology, 2, 5881. doi:10.3402/ejpt.v2i0.5881
- Torstenson, R. (2006). The healing aspects of working through trauma with art therapy: A qualitative phenomenological investigation of art therapists' experiences working with trauma survivors.. The Chicago School of Professional Psychology. AAT 3196283.
- Tran, U. S., & Gregor, B. (2016). The relative efficacy of bona fide psychotherapies for posttraumatic stress disorder: A meta-analytical evaluation of randomized controlled trials. BMC Psychiatry, 16(266). doi:10.1186/s12888-016-0979-2
- van der Kolk, B. A. (1994). The body keeps the score: Memory and the evolving psychobiology of posttraumatic stress disorder. Harvard Review of Psychiatry, 1, 253-265. doi:10.3109/10673229409017088
- Wertheim-Cahen, T. (2007). De rol van vaktherapieën bij de behandeling van psychotrauma. In P. G. H. Aarts & W. D. Visser (Eds.), Trauma: Diagnostiek en behandeling (pp. 313-328). Houten, The Netherlands: Bohn Stafleu van Loghum.
- Wertheim-Cahen, T., van Dijk, M., Schouten, K., Roozen, I., & Drodek, B. (2004). About a weeping willow, a phoenix rising from its ashes, and building a house... art therapy with refugees: Three different perspectives. In J. P. Wilson & B. Drozdek (Eds.), Broken spirits: The treatments of traumatized asylum seekers, refugees, war and torture victims (pp. 419– 442). New York: Brunner-Routledge.
- Wild, J., & Gur, R. C. (2008). Verbal memory and treatment response in post-traumatic stress disorder. British Journal of Psychiatry, 193, 254-255. doi:10.1192/bjp.bp.107.045922