



Transport Accident Commission & WorkSafe Victoria

Evidence Service

Art Therapy

Plain language summary

After a traumatic event (such as a car accident), a person may feel shock, anxiety, numbness, or a feeling that their life is out of control. Some people develop Post-Traumatic Stress Disorder (PTSD). This makes the person think about the trauma, or avoid thinking about it. They may avoid people associated with the trauma. They may not feel any emotion, or feel jumpy or too alert to things around them. PTSD is a serious condition. It can worsen a person's health and well-being.

Sometimes art therapy is used with people who have been through trauma. This is because some believe that memories are stored as pictures in the mind. An art therapist will help a person to make art related to their memories of the trauma. This is meant to get the images out of their head and try to help them to work out their feelings and thoughts related to the trauma.

Very little high-quality research has been done to test if art therapy works to help people with PTSD. Overall there is not enough information to say if art therapy is a useful treatment for people who have been through trauma.

A joint initiative of











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Overview

We were unable to identify any synthesised studies or randomised controlled trials (RCTs) evaluating the effect of art therapy in adult trauma patients within an outpatient setting.

General Comments

The only available studies evaluating art therapy have been conducted within inpatient settings in children and adolescents. In this report we have summarized this body of evidence in an attempt to extrapolate their results to adult trauma patients in the outpatient setting. We identified four synthesized studies and three RCT's that have investigated the effectiveness of art therapy to reduce psychological harm from traumatic events among children and adolescents. Based on the results of these studies there is insufficient evidence to determine the effectiveness of art therapy.

Is art therapy an effective therapy for individuals following trauma?

There is insufficient evidence to determine the effectiveness of art therapy for individuals following trauma

Can it enable patients to address psychological issues related to their trauma?

There is insufficient evidence to determine the effectiveness of art therapy in preventing or reducing psychological harm among individuals who have developed symptoms of PTSD following traumatic exposure.

What are the indications for art therapy, i.e. in which conditions post-trauma is it effective?

We did not identify any official indications for use of art therapy post trauma.

What measures can be used to assess the outcomes of art therapy?

Not specifically stated, however, all the studies and reviews summarized in this report used the UCLA PTSD Reaction Index. This is a self-report tool that measures the frequency of three types of PTSD symptoms: reexperiencing symptoms, avoidance symptoms, and hyperarousal symptoms. A posttraumatic severity score is calculated from the sum of the responses. (1)

Does art therapy improve functional outcomes (improves activities of daily living, return to work, leisure etc.) for individuals following trauma?

These outcomes were not examined

Does art therapy reduce medication use or use of other healthcare services such as therapy or medical services?





These outcomes were not examined

What criteria exist to define an art therapist?

No criteria provided

If art therapy is effective, what is the correct amount of art therapy to achieve outcomes?

There is insufficient information to answer this question





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Evidence Review

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BACKGROUND

When a patient experiences a traumatic event, a range of emotions, thoughts and sensations can follow, including shock, anxiety, numbness, regression and loss of self-control.⁽²⁾ In some cases, exposure to trauma can lead to a serious psychological condition known as Posttraumatic Stress Disorder (PTSD). PTSD is characterized by symptoms such as "reliving the traumatic event or frightening elements of it; avoiding thoughts, memories, people, and places associated with the event; emotional numbing; and elevated arousal".⁽³⁾ PTSD is a complex condition that is often accompanied by other psychological disorders. PTSD can be associated with significant morbidity, impairment of function and reduced quality of life.⁽³⁾

Art therapy is a form of treatment that is sometimes used for patients that have experienced traumatic events. Art therapy is sometimes used based on a theory that traumatic events are stored in the brain visually, as disrupted images. Art therapy is used to try to help patients to explore these images in order to externalize, process and resolve the emotions, thoughts and sensations related to the traumatic event. This involves the patient exploring different art materials including paints, inks, clay, photographs and other media with the guidance of an art therapist. The patient can consider their trauma experience in a safe and non-intrusive manner. In working with the therapist the patient can understand the meaning behind their artwork and with further treatment sessions regain control of their life. (2, 5)

Depending on the individual's personality, their pre-trauma experiences, quality of supportive relationships and coping style, they can undergo art therapy alone or in a group. Group art therapy can be used to try to help patients build their self-confidence and improve their social reintegration. (5, 6) In this capacity individuals are able to relate to one another's shared experiences which they otherwise may have felt was unique only to them.

In order to develop policies for the use of art therapy in patients who have undergone a traumatic event, the Transport Accident Commission and WorkSafe Victoria (TAC/WSV) Health Services Group requested a review of the evidence supporting the effectiveness of art therapy for individuals following trauma, and functional outcomes including quality of life and return to work.





QUESTIONS

This Evidence Review sought to find the most up-to-date, high quality source of evidence to answer the following questions regarding the use of art therapy following trauma

- Is art therapy an effective therapy for individuals following trauma?
- Can it enable patients to address psychological issues related to their trauma?
- What are the indications for art therapy, i.e. in which conditions post-trauma is it effective?
- What measures can be used to assess the outcomes of art therapy?
- Does art therapy improve functional outcomes (improves activities of daily living, return to work, leisure etc.) for individuals following trauma?
- Does art therapy reduce medication use or use of other healthcare services such as therapy or medical services?
- What criteria exist to define an art therapist?
- If art therapy is effective, what is the correct amount of art therapy to achieve outcomes?





METHODS

Methods are outlined briefly below. More detailed information about the methodology used to produce this report is available in Appendices 1 and 2. All appendices are located in the Technical Report accompanying this document.

A comprehensive search of Medline, Embase, the Cochrane Library, CINAHL, PsycInfo and Web of Science was undertaken in November 2011 to identify relevant synthesised research (i.e. evidence-based guidelines (EBGs), systematic reviews (SRs), health technology assessments (HTAs)), and any relevant randomised controlled trials (RCTs). A comprehensive search of the internet, relevant websites and electronic health databases was also undertaken (see Appendix 2, Tables A2.2-A2.4 for search details). Reference lists of included studies were also scanned to identify relevant references.

Studies identified by the searches were screened for inclusion using specific selection criteria (see Appendix 2, Table A2.1). Synthesised evidence (EBGs, SRs and HTAs) that met the selection criteria were reviewed to identify the most up-to-date and comprehensive source of evidence, which was then critically appraised to determine whether it was of high quality. This process was repeated for additional sources of evidence, if necessary, until the most recent, comprehensive and high quality source of evidence was identified. Findings from the best available source of evidence were compared to other evidence sources for consistency of included references and findings. The algorithm in Table 1 was followed to determine the next steps necessary to answer the clinical questions.

Table 1. Further action required to answer clinical questions

| Is there any synthesised research available? (e.g. EBGs, HTAs, SRs) | | | | |
|---|--------------------|------------------|---------------------|--------------------------|
| Yes | | Yes No | | lo |
| Is this good quality research? | | ? | Are RCTs available? | |
| Yes | | No | Yes | No |
| Is it current (within 2 years)? | | | | |
| Yes | No | | | Consider looking for |
| No further action | Update existing SR | Undertake new SR | Undertake new SR | lower levels of evidence |

Data on characteristics of all included studies were extracted and summarised (see Appendix 4). The most recent, relevant, high quality systematic review was used to address the questions posed above.





RESULTS

The electronic database searches yielded 3,341 potentially relevant references.

Among these articles we were unable to identify any RCTs examining the effectiveness of art therapy for adults following trauma in the outpatient setting.

The only available studies evaluating art therapy have been conducted within inpatient settings in children and adolescents. In this report we have summarized this body of evidence in an attempt to extrapolate their results to adult trauma patients in the outpatient setting. We identified four synthesised studies; two EBGs⁽³⁾, and two SRs.^(4,8) The EBGs were for the management of posttraumatic stress disorder (PTSD), and the SRs focused on reducing symptoms of trauma. All four studies were quality assessed and it was found that three of the studies^(3,7,8) did not provide sufficient information to determine their quality and overall risk of bias (see Appendix 5 Tables A5.1-A5.3). The other study, a SR by Wethington et al.,⁽⁴⁾ was quality appraised and was found to have a low risk of bias (see Appendix 5 Table A5.4), therefore, this study was used as the basis for this report. This study identified one RCT evaluating art therapy, Schreier et al. 2005.⁽⁹⁾

In addition to the RCT identified by Wethington et al., ^(4, 9) we identified two additional RCTs of art therapy for PTSD in children and/or adolescents: Lyshak-Stelzer et al. 2007, ⁽¹⁾ and Chapman et al. 2001. ⁽¹⁰⁾ Two of the RCTs ^(9, 10) evaluated the effect of a one-off treatment with the Chapman Art Therapy Treatment Intervention (CATTI) that took place between 12 and 48 hours after admission to hospital for traumatic injury. These studies found no difference in effect when compared to standard hospital treatment, ⁽¹⁰⁾ and no sustained effects in the reduction of PTSD symptoms. ⁽⁹⁾ The other RCT ⁽¹⁾ was a study of adjunctive art therapy for chronic PTSD in an inpatient psychiatric facility for youth. This study found a positive effect for art therapy.





Table 3. Key information from most recent, comprehensive, high quality systematic review (inpatient setting)

| Wethington HR, Hahn RA, Fuqua-Whitley DS, Sipe TA, Crosby AE, Johnson RL, et al. The effectiveness of interventions to reduce psychological harm from traumatic events among children and adolescents: a | | | | |
|--|---|--|--|--|
| systematic review. American Journal of Preventive Medicine. 2008 Sep;35(3):287-313. Study design Systematic review of controlled studies | | | | |
| Study design | | | | |
| | This study included 30 trials of which only one evaluated art therapy | | | |
| Scope | Patient/population: people < 21 years of age, living in countries with high-income economies | | | |
| | Conditions indicated for use: children and adolescents exposed to traumatic events (individual/mass, intentional/unintentional, or manmade/natural). | | | |
| | Interventions: Cognitive behaviour therapy (CBT), Play therapy, Art therapy, Psychodynamic therapy, Pharmacologic therapy, Psychological debriefing. | | | |
| | Comparators: any (placebo, standard care, other intervention) | | | |
| | Outcomes assessed: indices of depressive disorders, anxiety and posttraumatic stress disorder, internalizing and externalizing disorders, and suicidal behaviour | | | |
| Is art therapy an effective therapy for individuals following trauma? | There is insufficient evidence to determine the effectiveness of art therapy in preventing or reducing psychological harm among children and adolescents who have developed symptoms of PTSD following traumatic exposure | | | |
| Can it enable patients to address psychological issues related to their trauma? | There is insufficient evidence to determine the effectiveness of art therapy in preventing or reducing psychological harm among children and adolescents who have developed symptoms of PTSD following traumatic exposure | | | |
| What are the indications for art therapy, i.e. in which conditions post-trauma is it effective? | We did not identify any official indications for use of art therapy post trauma | | | |
| What measures can be used to assess the outcomes of art therapy? | Not specifically stated in this SR | | | |
| Does art therapy improve functional outcomes (improves activities of daily living, return to work, leisure etc.) for individuals following trauma? | These outcomes were not examined in this SR | | | |
| Does art therapy reduce medication use or use of other healthcare services such as therapy or medical services? | These outcomes were not examined in this SR | | | |
| What criteria exist to define an art therapist? | No criteria provided in this SR | | | |
| If art therapy is effective, what is the correct amount of art therapy to achieve outcomes? | There is insufficient information to answer this question | | | |





| Conclusion/Recommendation of the study | "There is insufficient evidence to determine the effectiveness of art therapy in preventing or reducing psychological harm among children and adolescents who have developed symptoms of PTSD following traumatic exposure." |
|--|--|
| Recommendation category | Insufficient evidence to determine effectiveness |
| Quality assessment results | High quality/low risk of bias |
| Our comments/summary | This systematic review was well conducted with a low risk of bias. This review only identified one RCT related to art therapy, and the authors concluded that the evidence for art therapy was insufficient. |

Findings

Due to the findings of the systematic review above, we conclude that there is insufficient evidence to determine the effectiveness of art therapy adults, children or adolescents following trauma.

DISCUSSION & CONCLUSION

No synthesised studies or RCTs examining the effectiveness of art therapy for adults following trauma in the outpatient setting have been published. The majority of research conducted is in the form of case studies, or other uncontrolled types of research.

Three RCTs of art therapy for PTSD in the inpatient setting were identified, ^(1, 9, 10) and even though these studies have not been quality appraised to determine the validity of their findings, they do offer information on the question of which measures can be used to assess the outcomes of art therapy. All three RCTs looked at reducing PTSD symptoms, and all used the UCLA PTSD Reaction Index to measure outcomes, which is designed for measuring symptoms in children and adolescents. Only one paper provided criteria to define an art therapist: "treatment was provided by a Registered Art Therapist with an art therapy master's degree and at least 2 years of art therapy practice in the setting". ⁽¹⁾

The only available higher level studies that looked at the effects of art therapy for children and adolescents were all conducted in inpatient settings. Overall the results of these studies were inconclusive. Furthermore these studies did not report on outcomes related to function, quality of life, medication use or healthcare utilisation.

Given the uncertainty of these results there is insufficient evidence to determine the effectiveness of art therapy following trauma in adults in the outpatient setting.





DISCLAIMER

The information in this report is a summary of that available and is primarily designed to give readers a starting point to consider currently available research evidence. Whilst appreciable care has been taken in the preparation of the materials included in this publication, the authors and the National Trauma Research Institute do not warrant the accuracy of this document and deny any representation, implied or expressed, concerning the efficacy, appropriateness or suitability of any treatment or product. In view of the possibility of human error or advances of medical knowledge the authors and the National Trauma Research Institute cannot and do not warrant that the information contained in these pages is in every aspect accurate or complete. Accordingly, they are not and will not be held responsible or liable for any errors or omissions that may be found in this publication. You are therefore encouraged to consult other sources in order to confirm the information contained in this publication and, in the event that medical treatment is required, to take professional expert advice from a legally qualified and appropriately experienced medical practitioner.

CONFLICT OF INTEREST

The TAC/WSV Evidence Service is provided by the National Trauma Research Institute. The NTRI does not accept funding from pharmaceutical or biotechnology companies or other commercial entities with potential vested interest in the outcomes of systematic reviews.

The TAC/WSV Health Services Group has engaged ISCRR, who in turn engaged the NTRI for their objectivity and independence and recognise that any materials developed must be free of influence from parties with vested interests. The Evidence Service has full editorial control.





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