Service evaluation of a training course, that teaches a new PTSD treatment protocol designed for children: Assessing the potential of an arts based, cognitive approach to treating traumatised children in Rwanda; through the training of lay counsellors

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Abstract

Aims:

This investigation explores the effectiveness of a two day training course for experienced, practicing child therapists teaching a cognitive, memory based approach to treating PTSD in children. The evaluation of the course is based on two elements. Firstly, do the techniques elicit imaginal exposure and rescripting, and secondly if they do, are participants able to apply the methods they have been taught effectively in their clinical work?

Methods: This paper examines techniques taught on the course through the analysis of the character based imaginal reliving and rescripting training exercise. The study then presents data collected through a three month follow up, evaluation, questionnaire sent out to trainees.

Findings:

The data collected from the four trainees based on their work with six children found that three of them had been able to use the techniques in their work, and that children had been able to use it for imaginal reliving of traumatic events, and for imagery rescripting. The feedback also suggests that the technique was therapeutically useful in helping reduce the distressing symptoms that they had presented with.

Conclusion:

CATT has the potential to be a useful technique that can be taught quickly and effectively put in to practice in a child centred way, for the treatment of PTSD.

Contents

Introduction

This paper investigates the potential of a new protocol, for the treatment of children and young people suffering the symptoms of posttraumatic stress disorder (PTSD) in Rwanda; in particular the issues associated with traumatic memories. The protocol that this paper will be addressing is the Children's Accelerated Trauma Treatment (CATT). CATT was developed over a period of five years, it has been created out of an approach used by a children's therapist in working with traumatised children. The origins of the approach came through the combination of: techniques learnt in training at the Institute of Arts in Therapy and Education (IATE), which teaches integrated arts techniques, such as the use of puppets, sand tray exercises, therapeutic story telling, art, and drama; knowledge of the needs of traumatised children developed through supporting children on a specialist project; and training as a human givens therapist. These elements combined to create a model of practice used in her therapeutic work with children. This all led to a model of individual therapeutic practice. The CATT approach was written up as a model after an invitation to support a training course in Rwanda, to teach techniques that could be used with children by lay counsellors. The positive feedback from the training participants, as well as the observed level of need for support for children with PTSD in Rwanda was the motivation behind the development of the CATT protocol and to the formation of Luna Children's Charity as organisation able to deliver this protocol to services without the funds to access specialist training. This paper will be looking both at the development, and structure, of the CATT approach and protocol.

The service evaluation element of this paper looks at the effectiveness of a two day training course for experienced child therapists in the U.K., who have volunteered to teach the protocol in Rwanda. The focus of the evaluation project is to assess whether the training course they attended enabled them to use the key element of the CATT approach, in treating PTSD in children. The techniques taught are arts based, cognitive approaches, that use characters created by the child out of craft materials (such as pipe cleaners, and paper and pens) to relive their traumatic memories. The protocol has twelve elements and the trauma technique has two stages. This paper will be focusing particularly on these trauma treatment stages The first of these stages is to allow the child to create a coherent narrative, eliciting a full range of sensory memories, which aims to reduce the level of negative arousal associated with it; the second stage is an imaginal re-scripting technique that is designed to allow the child to create a fantasy narrative based on the original narrative that can be changed to give them a more positive or empowering story.

The evaluation project that will be presented looks at the effectiveness of the course in enabling the therapists to apply these techniques in their clinical work with traumatised children. It also looks at the therapists experience of the training course and in integrating the approach in their work. The evaluation data is then looked at in the context of the over arching aim of the CATT protocol, as a potential method for treating traumatised children, that can be taught to lay counsellors in Rwanda.

In order to asses the potential and need for CATT, in Rwanda; as well as the proposed approach to training delivery (through Luna Children's Charity) it is necessary to look at, post traumatic stress disorder (PTSD) in children, the level of need in Rwanda, and at the existing treatment approaches available for children with PTSD. These are all looked at in a literature review.

This paper looks firstly at PTSD as a mental health disorder in children. It runs through the key treatments available and their theoretical basis. This includes trauma focused CBT and EMDR, as they are the recommended treatments of choice, based on the current evidence from clinical studies (National Institute of Clinical Excellence, 2005, Rodenburg, 2009). In addition this paper also looks at two treatment protocols that have been designed to be delivered in countries with mass need or limited mental health services. These are: KidNET (Neuner, 2008) which is a version of Narrative Exposure Therapy, that has been adapted for children, and in way that can be delivered in field settings; The other is the Teaching Recovering Techniques manual (Smith et al, 1999) that has been developed to treat children in areas affected by war or disaster, which is a train the trainer model for non mental health professionals. After exploring these models, the development of CATT and its component parts will be discussed in more detail, drawing out its key features and underlying theory.

Following this, the project element of this paper will be presented. This will be exploring two key issues: firstly it will look at the central techniques of the CATT protocol; the use of characters to relive and re-script traumatic memories; and secondly at the process of teaching the method and whether this enables trainees to use it in their therapeutic work with traumatised of

The paper will conclude with a discussion of the project data, and an exploration of what this can tell us in the light of existing theories and therapeutic approaches to treating PTSD in children. In order to do so, the paper will look both at the protocol itself as well as the proposed method of rolling it out in Rwanda.

Literature Review

PTSD in children and the need for treatment in Rwanda

The current Diagnostic manual DSM –IV-TR (American Psychiatric Association, 2000) describes PTSD as a disorder with several clusters of symptoms that can develop following an extreme traumatic experience. Unlike other psychiatric disorders this used as a diagnostic criteria rather than a risk factor. In addition to the traumatic experience, the diagnostic criteria also include, reexperiencing symptoms, avoidance symptoms, and increased arousal symptoms. There is also a criteria that the symptoms must be causing significant distress or impairment.

Smith et al (2010) point out that these criteria were originally designed just for adults, as when PTSD as a disorder was defined it was only thought to affect adults. They point out that work since then has evidenced that the impact of extreme trauma leads to very similar kinds of symptoms in children. The current DSM- IV-TR(American Psychiatric Association, 2000) diagnostic criteria has some notes added to several of the diagnostic criteria. These focus in particular on the reexperiencing criteria, these include: repetitive play related to the trauma,

frightening dreams, without recognisable content, and re-enacting trauma related experiences.

Although adaptations have been made to the diagnostic criteria there is discussion amongst clinicians and researchers that the next diagnostic manual should be changed to better reflect the symptoms and distress of children who have experienced trauma. Cohen and Schreeinga (2009) for example, argue that reducing the avoidance criteria from three out of seven to one would provide better diagnosis. Pynoos et al, (2009) also propose a more developmentally sensitive approach to diagnosing PTSD, due to the huge changes that children go through, from birth to adulthood.

Although the diagnostic criteria may not be currently sensitive in capturing the symptoms of children following extreme trauma, there is strong support from research that PTSD is a serious psychiatric disorder amongst children, Fairbanks (2008); Zatzick et al, (2008) as cited by Pynoos et al (2009).

The NICE Guidance on PTSD (National Institute of Clinical Excellence, 2005) suggests that in the U.K. the level of morbidity in children is around 1%. This represents a significant number of sufferers. Cohen and Scheringa (2009) suggest although most children recover from extreme trauma, approximately 30% go on to develop ongoing symptoms and impairment as a result. This is supported by Yule et al, (2000) as cited by Smith et al, (2010) who found that around a third of survivors of the Jupiter disaster met criteria for PTSD five years after the event.

The long lasting impact of PTSD can be seen in a paper by Morgan et al (2003), as Cited by (National Institute of clinical excellence 2005), that found that a significant number of child survivors of the Aberfan disaster, were still suffering thirty three years later.

Particular experiences lead to greater levels of PTSD. The current DSM IV (American Psychiatric Association, 2000), suggests that for those exposed to rape or war may have a prevalence of between one third, and over a half. In countries affected by war and disaster the levels of post traumatic stress are likely to be substantially higher. Olij (2005) describes the difficulties that many children and young people are experiencing in Rwandan schools. Schall and Elbert (2006) as cited by Neuner et al, (2008) found that 44% of surviving orphans of the genocide were still suffering with PTSD, Nuener et al (2008) also cites Sack et al (1999) that PTSD can persist for more than ten years, even when the children live in a safe environment.

What these studies suggest, is that countries that experience and conflict will have a large population, including children, who will go on suffering the effects of trauma for many years, if they do not receive effective treatment. In low income countries the delivery of mental health support can be a huge problem. Utuza and Muss (2010) point out that there are only 282 clinical psychologists for a population of 8 million. They also cite Nasson (2010) that the current estimate of PTSD in Rwanda is 28.5%. In order to meet the need for effective treatment for PTSD in Rwanda, there is clearly a need for the development of wide ranging interventions that can treat the huge level of ongoing suffering; many years after the genocide has past.

Trauma focused CBT with children and young people

The National Institute of Clinical excellence guidance on the best evidenced treatment for PTSD in children, found that trauma focused CBT had the strongest evidence base (National Institute of Clinical Excellence, 2005). An

example of the evidence for the effectiveness of CBT are; a large scale multi-site site trial for abuse-related children carried out, that found significant improvement of symptoms with trauma focused CBT (Cohen et al 2004); and an efficacy study looking at single incident trauma treatment, using trauma focused CBT, that found significant improvement, which was maintained at six month follow up (Smith et al 2007).

However, the guidance given by NICE also made clear that the field of child PTSD was under researched compared with adult PTSD.

Within trauma focused CBT there are two particularly well researched models, although there are many other variants with similar approaches that would fall into this category. This paper will outline some of the key aspects of trauma focused CBT in general, but due to the limitations of this paper it will focus in more detail on two models with particularly strong evidence bases. These are Cognitive therapy for PTSD based on the Ehlers and Clarke model (2000), which is based on the principle that trauma memories need elaborating and has a strong cognitive therapy approach; the other is a prolonged exposure based treatment based on Foa, Rothbaum, Riggs, and Murdock (1991) manual, which is based on fear network model of PTSD. The prolonged exposure approach has a strong evidence base. Powers et al (2010) found in their meta-analysis a large effect size of 1.08 across the studies. It has also been successfully applied with children and young people (Yule et al 1998). This gives good reason to see prolonged exposure as a first choice treatment, but Powers et al (2010) also found that the studies showed no significant difference between prolonged exposure and cognitive therapy or EMDR in the treatment of PTSD. In a systematic review of treatment for children and young

people suffering from traumatic experiences, it was found that there was strong evidence for the effectiveness of both group and individual CBT in reducing symptoms (Wethington et al 2008). This particular study included EMDR in the CBT category because of its similarities in the centrality of imaginal exposure in its treatment approach. A more recent meta- analysis of the efficacy of EMDR in children found that EMDR had an incremental efficacy over CBT (Rodenburg 2009). This was due to a shorter number of sessions being required to achieve the same degree of symptom reduction. These two studies suggest that the EMDR as a treatment approach for children needs to addressed in looking at current evidenced based treatments for PTSD in children and young people. This paper will look at EMDR separately to the CBT approaches to draw out its differences in term of approach and in its different underlying model.

Looking, first, at the general aims of trauma focused CBT approaches, Smith et al (2010) suggest that these contain four key elements, these are: psycho-education, to normalise PTSD symptoms, and to explain treatment approaches; behavioural activation to encourage the child to restart activities that they may have stopped; imaginal (using the imagination to create images and other sensory experiences) and in vivo exposure(actually visiting places or being exposed to real objects or sensory elements) to traumatic memories and reminders; working closely with parents and carers; and relapse prevention.

All approaches to CBT for PTSD have an element of imaginal reliving to help the patient to process their traumatic memories. This is done to help the

patient to develop a coherent narrative to the traumatic event and to help them to reduce their fear responses to it. Both models see this as key to treating the symptoms of PTSD although with slightly different model explaining how this is done and the purpose of the particular approach.

The first is a behavioural approach that it based on prolonged exposure that has it theoretical basis on a fear network model. Prolonged exposure requires a long treatment process and requires as the name suggests prolonged exposure to the traumatic memories. This is graduated up to the most distressing element and these are recalled until the distress and emotional arousal associate with recall diminishes.

In order to gain habituation to the traumatic memories, these are often written or verbally recorded by the patient and they are encouraged to listen to these repeatedly as home work. This serves the dual purposes of enhancing the coherence of the trauma narrative at the same time as promoting habituation to the feared stimulus (in this case the trauma memory). In addition, in vivo exposure is sometimes included, which can involve an element of the trauma, or visiting the site of the event. This process has been found to very effective with adults (Powers et al 2010) and has been successfully applied to children as well (Neuner et al 2008). Neuner et al (2008) describe how the process can be made more developmentally appropriate to children through the use of drawings, body positioning, or playing out using little figures or toys the traumatic events. However they also make clear at the start of the process, it is essential that the reliving is distressing in order to enable the effective habituation of the fear response.

The key issues with this process are; that it intensive and requires many sessions, and secondly that the process is very difficult to go through for both the child and the therapist, as they have to be repeatedly exposed to traumatic and distressing thoughts and images. The duration of the process has been adapted by to be delivered in shorter durations in places of high need for both adults (Neuner et al 2008) and children (Onyut, et al,2008) The aim is to activate the fear network and then to add information that enables the child to see that the feared memory contains no current threat with the result that over time this enables the fear network to be better regulated and prevented from unwanted activation by current thoughts or situational triggers.

KidNET (Neuner et al, 2008) has been developed out of field experience in an African context with Refugees in Uganda. It has the strength that it has been created in context rather than developed in research clinic and then adapted. It was developed directly from theory in a field setting. It has been structured with key feature in mind these are that it needs to be of short duration and that it needs to be structured in a way that makes it possible to be delivered by lay counsellors (Neuner, et al 2008) The field success of the manual and its structure make it a good methodology for providing treatment in high need settings with minimal mental health infrastructure. However, despite its many strengths, this approach cannot be seen as the treatment of choice, due to the centrality of inducing distress in the protocol, as there are other equally effective approaches such as trauma focused cognitive therapy and EMDR, that are designed to ameliorate this. Avoidance of distress in

patients should be a priority in the development of treatments, especially for children.

The other model that has been applied successfully in the U.K. is an adapted version of the Clarke and Ehlers protocol for treating PTSD with adults with a more Cognitive approach (Ehlers and Clarke, 2000). This contains much less intensive reliving and is based on a slightly different under pinning model of the development and maintenance of PTSD. This model proposes that cognitions at the time, and peri-traumatic thoughts, prevent the memories being processed and as a result the patient still experience the memories as a current threat. It aims to target these cognitions through imaginal reliving. The imaginal reliving is carried out to enable cognitive restructuring, and once this is achieved the theory proposes that the emotional arousal associated with the memory will be reduced and thus reduce the unwanted symptoms. According to Smith, et al, (2010) what characterises the Ehlers and Clarke approach (adapted for children) is a greater emphasis on cognitions and the updating of trauma memories in imaginal and cognitive work. Elements of this include carried reliving (both imaginal and in vivo) and narrative writing. A key aim is to promote stimulus discrimination; this is to enable the patient to see the differences between current experiences and those of the traumatic event, thus minimizing the sense of current threat. This is further embedded by revisiting the site, this is to enable the person to update the trauma memory and better discriminate between then and now, and thus help to put the traumatic event in the past.

This has been successfully adapted to be applied to children and has been found to be effective in trials with a short number of sessions, and with no drop out suggesting high acceptability (Smith et al 2007). Currently it is used by experienced and trained Psychologists in specialist clinics. Even though shorter than prolonged exposure it still requires a median number of 9 sessions. The effect size for this randomized control trial was excellent at 2.48 suggesting a really strong efficacy. However, the very high quality of the setting in a university clinic, and delivered by very experienced doctoral level clinical psychologists (with supervision from experts in the field; William Yule and David Clarke) it is important to be cautious about extrapolating the findings to routine clinical practice. However after taking this into account, the study provides very good evidence for the cognitive therapy approach as a treatment of choice for children, due to four key components, acceptability, good effect size, maintenance of gains at follow up and relatively short treatment.

In applying it to younger children Smith et al (2010) who describe in depth the application of this model make clear that it is necessary to take a developmentally appropriate approach and make use of play and art to work through the traumatic events, but with the same clear structured approach to processing the events, so that they are less fragmented and clearly placed in the past. They describe using story boards or series of drawings, to create a linear structure that can be developed into a book.

Eye movement desensitization reprocessing therapy (EMDR)

The second well established trauma treatment for PTSD is eye movement desensitisation and reprocessing therapy (EMDR). This has been researched extensively and found to be comparable to Trauma focused CBT, in a meta-analysis of PTSD treatment in adults (Ponniah and Hollon 2009). Meta-analysis of EMDR in children has found, that its effectiveness is medium and significant (Rodenburg et al 2009). The authors of that analysis also found that EMDR, when compared to the established trauma treatment CBT, added a small, but significant incremental value.

Eye movement desensitization and reprocessing (EMDR) is an approach to treating PTSD developed by Francine Shapiro (Shapiro 1995). It was developed with a clear protocol to treatment. The central element of EMDR is brief imaginal reliving with a bilateral distraction. This was originally done through the patient following the therapist finger from side to side, but this element can be replaced with tapping or following a noise from side to side (Rodenburg et al 2009). The reliving element is included not to create habituation through exposure, but to access the traumatic memory in order to replace negative cognitions with more positive beliefs. This is done through brief imaginal reliving with the bilateral distraction, and focuses on encouraging the patient to recall the most relevant emotion associated with the terrifying memory, and the associated negative cognitions. Next, the patient is asked to identify a positive cognition (a thought that they would prefer to have). This brief imaginal reliving process is repeated until the patient rates their distress as zero using subjectitive units of distress (SUDS)

and their validity of cognition (VOC) as 7, with 7 being the highest. (Ahmad and Sudelin-Wahlsten 2007).

EMDR has a shorter treatment process than CBT in trials with a duration of 1-12 sessions and 1-20 sessions respectively (Ponniah and Hollon 2009).

The imaginal reliving element can include re-scripting to help support the development of a the new positive cognition, but it is not central to the technique (Rusch, et al, 2000)

It has been criticised for the lack of evidence supporting the bilateral element of the process that differentiates it from CBT approaches in general. However, there is evidence that the use of bilateral distraction elements can reduce the recall of traumatic memories,(Holmes et al 2004). Although the approach is not fully understood, its efficacy and treatment success in meta-analysis studies (Ponniah and Hollon, 2009, Rodenburg et al, 2009) suggests that there is some benefit to the inclusion of the technique.

It has been successfully adapted for use with children, with minor changes to support children rating their emotions thorough face picture, and in helping them find alternative cognitions through socratic questions, about how it could be instead. (Ahmad and Sundelin-Wahlsten, 2007). It has also been successfully adapted by several others (Tinker and Wilson, 2009, Greenwald 1999, and Adler-Tapia and Settle 2008, as cited by Rodenburg 2009).

EMDR has been successfully applied in Iraq with children (Wadaa,et al, 2010) suggesting that it may be applicable in low income countries with high levels of trauma.

Teaching Recovery Techniques Manual

One final approach that needs to be looked at, that is of relevance to the development of an evidenced approach for children in low income countries, is the “Teaching recovery techniques” manual (Smith et al, 1999). This is an evidence based approach that is designed to be rolled out in area affected by war or disaster. It is a train the trainer approach, which enables people with minimal mental health experience, to deliver an intervention package to children in groups. It has been successfully used in several countries with good outcomes, such as Giannopolou et al, (2006), who describe its use in Greece following an earthquake. The manual is a pragmatic approach designed around what is possible in low income countries with massive need. It contains elements from a variety of effective approaches, including exercises that use bilateral stimulation, as utilised with benefit in EMDR (Shapiro 1995) and techniques for reducing repetitive frightening dreams that follow established, evidenced based practice. As an approach it has good claims to be the existing treatment approach of choice in low income high trauma settings as it is designed to delivered to large numbers through its use of group work and minimal training for those delivering the protocol. It has been more widely applied than KidNET and has a wide range of elements in the treatment approach. In particular it has been found to effective at reducing PTSD symptoms post intervention, without the need to focus on invoking distress through reliving. However it is not marketed as a treatment, but as an intervention. It group delivery approach however may also be seen as its biggest weakness, it is not clear that this approach will be as effective as individual treatment. As all the current evidence based approaches involve supported reliving in a series of sessions, it would seem likely that this

approach would still leave some children needing additional therapeutic support. Thus the delivery of the Teaching Recovery Techniques can be seen as powerful tool in combating post traumatic distress, but not one that can be seen as fully sufficient in addressing the suffering from PTSD following war and disaster.

Imaginal re-scripting

A key element of the CATT protocol, and the subject of the project element of this paper, is its imaginal re-scipting element used to address distress associated with traumatic memories or nightmares. For this reason it is necessary to review how this fits into existing clinical practice and research. Firstly, as can be seen above the use of imagery as tool for reliving is an element of all the current evidenced based effective treatments for PTSD in adults and children. To some degree there is also a small amount of imagery re-scripting in most approaches as well, although not in KidNET (Neuner, et al, 2008). Ehlers and Clarke's model(Ehler sand Clarke, 2000) contains descriptions of using imagery re-scripting to help with cognitive restructuring and this is also highlighted as approach to cognitive restructuring within reliving (Grey and Young 2002). EMDR treatment can also use some re-scripting to support new positive cognitions through changing images (Rusch, et al, 2000). However it is not a central feature of the treatment approach. There are some specific treatment approaches that use re-scripting a central element of the treatment protocol. One study has found that adding a re-scripting element to treatment of PTSD is equally effective compared with

imaginal exposure alone, and that it has several key advantages. Firstly it is more acceptable patients with this treatment having a much lower drop out rate, and for therapists who found the approach reduced feelings of helplessness in hearing about patients distressing experiences. The study also found that the approach helped with additional emotional not just fear, including anger and guilt (Antz, et al, 2007). The advantages of rescripting over exposure are supported by studies with victims of industrial accidents, that found that patients who had failed to achieve symptom reduction with prolonged exposure, found that imagery re-scripting and reprocessing was an effective treatment (Grunert, et al, 2007).

Other studies have found that distressing images associated with trauma can be effectively treated using imagery techniques. The treatment of nightmares in PTSD patients through an imaginal re-scripting technique know as Imagery rehearsal technique (IRT), Treating this element has been found to reduce not just sleep issues but also helped to reduce PTSD symptoms as well (Spoormaker and Montgomery, 2008). In dealing with distressing images that are not direct memories of the traumatic event, it has been found that imaginal re-scripting has been an effective treatment, where imaginal exposure has produced no reduction in symptoms (Rusch, et al, 2000)

A CBT treatment protocol that has been developed to integrate art therapy techniques, See Far CBT (Lahad, et al, 2010) uses imaginal re-scripting as a central treatment element in reducing the symptoms of PTSD. This approach was found in a controlled study to be comparable to EMDR in its effectiveness (Lahad, et al, 2010). This method is of particular interest to this paper as it uses an arts based technique within a CBT approach. It uses picture cards to

help relive and rescript the traumatic memories. The use of cards is designed to support externalizing and/or distancing, to help reduce the distress of narrating the traumatic events. This is very different from the Narrative Exposure Therapy approach that sees high levels of distress as central to effective treatment (Neuner, et al, 2008).

Brewin, et al, (2010) suggests that imagery re-scripting may work through a recall competition approach. That it allows the distressing sensory memories S- reps to become twinned with new C-reps that have a retrieval advantage. By being more pleasant or amusing or ridiculous they become more accessible and so are more readily recalled than the distressing C- reps. In cognitive theories including EMDR, it is often theorised that it is distressing cognitions that maintain PTSD , and that new images can update the cognition and replace it with more positive or empowering cognitions. This is also in line with the approach that Young has used in Schema therapy (Young et al, 1994) as cited by Edwards (2007) that has proved very effective with dealing with distressing past experiences in patients with borderline personality disorder.

The CATT model and protocol

The CATT approach takes a memory based approach to treating the symptoms of PTSD. It aims to be holistic, paying attention to the whole needs and circumstances of the child, as well as having a focus on the treatment the symptoms of PTSD. Its method and values would place it within a cognitive behavioural approach, although it was not developed out of specific training in this area. It is empirical in nature, and sees the relationship between therapist

and child as a respectful partnership, in which the child is an expert in their life and needs, and the therapist has knowledge and experience that may be useful in helping them with recovery. In order to more fully describe the CATT protocol and approach, and its potential as an approach to the treatment of PTSD in children, it is necessary to run through its creation, and how it has developed through working with traumatised adults and children.

The origins of CATT in work with traumatised children

The origins of CATT lie in direct project work with traumatised children. It did not have a theoretical or clinical perspective. It emerged from trying to meet the needs of very troubled children directly in their lives.

The approach that guides the CATT methodology was developed out of a specialist project for troubled and abused children. This project was set up to give emotional support and mentoring to children and young people, who were permanently excluded from mainstream services. Children were referred by social services, the local education department, and from the borough primary pupil referral unit. The children had diverse needs, but all came from households with domestic violence and most had been additionally abused themselves (sexually, emotionally, physically or through neglect). “Research carried out on the children attending the project showed that one hundred per cent of the children attending had, at some stage experienced extreme domestic violence” (Raby 2002, p13).

They all had acute emotional and behavioural difficulties, if not yet a formal mental health diagnosis. Given the life experiences and stressful home lives of the children, it is extremely likely that many of these children would have

been suffering the adverse effects of trauma. None of the children on the project had a diagnosis of PTSD; however given their levels of distress, and prior traumatic experiences, it seems highly likely, that many of them were suffering from the disorder. NICE (National Institute of Clinical Excellence, 2005) estimates that 1 per cent of children are likely to be suffering with PTSD; there is also evidence that PTSD is almost never diagnosed before the age of 10 in the U.K. (Meltzer et al, 2000), as cited by the National Institute of Clinical Excellence(2005). Cohen and Scheeringa (2009) suggest that much of this under recognition is due to the current diagnostic criteria. They suggest that current diagnostic criteria are not sensitive enough for preschool children and that this is also likely to be the case with prepubescent children as well. They also suggest that unlike other symptomology, such as hyperactivity or depression which are readily observable, PTSD has many internal symptoms, and is therefore more likely to go undetected.

The combination of the traumatic experiences, current life stressors, and lack of social support were common problems for many of the children on the project. Research suggests that these are the biggest risk factors associated with PTSD (Brewin, 2003). That the children did not have a diagnosis of PTSD may well be explained by the both weaknesses in the diagnostic (Cohen and Scheeringa, 2009), and the minimal recognition of PTSD as a target for assessment, and treatment (National Institute of Clinical excellence, 2005).

The children on the project ranged from 4-15 years of age. The project was housed by the local authority play service, and staffed by play workers, youth workers and some social workers. None of the staff had any formal mental

health training. The project aimed to increase their social skills, provide them with opportunities to express their feelings, see positive role models and decrease behaviour that had led to exclusions (in order to re-integrate them back in to mainstream school). The children and young people who attended the project accessed a range of provision that were tailored, to meet the individual needs. Examples of the support offered include: holiday trips out, after school group work, individual mentoring, alternative education provision, support workers in schools and special schools, and support work with parents.

The ethos of the service, and its approach to work, has provided some key underlying principles that can be seen in CATT. The first of these is a rights based and participative approach to working with children. Children and their parents identified the issues and problems that they wanted help with and support was offered through a partnership approach. Every day children on the project were able to use circle time meetings to “give children a chance to voice opinions” (Raby 2002 page 42). Secondly, the belief that children’s emotional and mental health cannot be understood or treated without understanding and addressing their bio- psycho- social circumstances emerged from observation of their life circumstances. “It is my intention to highlight the environmental issues, in conjunction with their domestic situation. These children cannot escape from the brutality of the general environment to an oasis of safety, for the cruelty, in many situations, continues in the home.” (Raby 2002. page 8). Many of the children were on the At Risk register and the project had to make almost daily referrals to social services about concerns about children’s safety. In addition to this, the families had multiple

stressors including commonly, parental mental health problems, substance abuse, domestic violence, racism, poverty, and poor housing.

The experience of working holistically with families and meeting their social and practical needs is a key influence on the CATT approach. It was clear that the large range of stressors, and lack of opportunities to make friends and play safely, were having a huge impact on children on the project.

This led to the development of a needs audit, to identify systematically, issues that needed to be addressed, in order to support children and their families general emotional well being. This was originally shaped by Maslow's idea of a hierarchy of needs. (Maslow1968). This belief, that any intervention works best if it addresses all the needs and circumstances of children to be effective, is evident in the structure of CATT as a protocol, see appendix 1. It is proposed that this approach has the advantage that in increasing protective factors it not only supports amelioration of the current distress, but also provides better resilience for the future.

The Use of therapeutic arts in helping troubled children communicate

The project introduced the theory and practice of working with children using arts based techniques taught by the Institute of Arts in Therapy and Education (IATE). This included the use of art and play techniques, the use of sand trays, play characters and puppets. These proved to be useful tools in allowing children to express their feelings with staff. The children on the project often felt more comfortable communicating emotional issues through creative, or play based methods than through talking.

This had a profound influence of the shaping of the CATT method with children. The experience of applying these techniques with troubled children, suggested that this was an approach that was helped children to talk about difficult emotions and situations. A meta-analysis of the use of drawing to help children communicate has found that is beneficial (Driessneck, 2005). In addition to this Nice Guidelines for PTSD (National Institute of Clinical Excellence, 2005) makes clear that any approach to working with children should be adapted in ways that are developmentally appropriate.

Observed issues when the children were offered Therapeutic services

Although offered therapeutic services, many of the children refused to attend or failed to benefit from the intervention. There appeared to be several key problems. Firstly the therapists often struggled with the violent behaviour of the children. Secondly the children would either refuse to engage during sessions, or would become overwhelmed and try to leave. "He would try to tie up the therapist, scream and lie on the floor, refusing to move, and would have to be dragged there, shouting that he hated the therapist and hated talking." (Raby, 2002, page 27). Although this may be a reflection of the unacceptability of the offered psychoanalytic psychotherapy to these traumatised children, another possibility is that the children's behaviour may have been examples of avoidance of trauma reminders. Whatever the cause of this impasse between the children on the project, and the therapy offered to them, the result was a lack of mental health intervention, for a very highly disturbed and troubled group of children.

The less formal and arts and play structure of the project allowed the children to feel comfortable with the staff team. This setting often enabled the children to talk about their feelings, past experiences and current situation in a way that they did not seem to be able to do in their formal therapeutic sessions. The therapeutic arts techniques were very effective, at rapidly allowing the children to find a safe and comfortable communication mechanism, to share with staff their horrific, dark and abusive lives. Therapists who use this approach describe how useful it is, for children to work through upsetting and difficult issues (Sunderland, 2000, Gardner and Harper, 1997). The use of play therapy has also been found to be useful in helping children with a range of problems in a meta-analytic review (Bratton et al, 2005). The children on the project often made significant progress in overcoming their difficulties and improving their general functioning, helped by the social support and opportunities to share their experiences and worries with supportive staff. However, several of the children who attended the project remained very troubled. They would often use the art or play techniques repetitively, without any resolution and were unable to elaborate, or move forward. Ongoing repetitive play is seen as an associated feature of PTSD, in the current diagnostic manual DSM IV (American Psychiatric Association, 2000). The experience gained on the project, was that many very troubled children have issues that cannot be effectively resolved through arts therapy techniques, even if they can engage with them. This is in line with research findings, that child centred therapy is less effective than trauma focused CBT in the treatment of child PTSD (Cohen et al, 2004). It is also supported by the NICE guidelines on PTSD (National Institute of Clinical Excellence, 2005) that

states that although all work with young children should be adapted to include art or play based approaches, there is no strong evidence for the effectiveness of play therapy for PTSD.

To summarise the key influences on the CATT methodology that came out the project:

- It is important to identify and find solutions to current social and practical life problems in helping traumatised children;
- The use of arts techniques are an excellent tool for enabling children to talk about upsetting and difficult emotional issues;
- That arts, or play based therapy, or psychodynamic talking therapies have not been evidenced as effective methods, for ameliorating all the symptoms of PTSD in children.

A Biological, memory based approach to treating PTSD, and the rewind technique

The original underlying approach to understanding PTSD was developed through the Human Givens Institute. The Human Givens approach (Griffin and Tyrel, 1990) is grounded in psychology and research, and does not use psychodynamic theories in its theory or practice. In terms of treating PTSD it uses a bio-psycho-social model to explain responses to trauma. It highlights the physiological impact of traumatic experiences, focusing on the fight and flight response. It looks at this as a basic animal response with evolutionary advantage in protecting the person from danger. It proposes that this is then

stored as a particular strong memory stored in a different way to usual autobiographical memories and that it is these traumatic memories that underlie the symptoms of PTSD. That memories are stored differently under traumatic stress is supported by neuroscience research (Lupien et al, 2009, and Roozendaal et al, 2009). This plays a key role in cognitive behavioural models of PTSD, such as Ehlers and Clarke (2000), and Brewin et al (2010). The Human Givens approach to therapeutic work has a strong imagery based approach to therapeutic work. Its authors Grifin and Tyrel (1990) see this as differentiating it from other cognitive behavioural approaches. However more recent developments in CBT, mean that imagery techniques are now a widely used approach. This has been highlighted by Edwards (2007) and Holmes et al (2007). With this in mind, it would seem reasonable to describe Human Givens therapy as a CBT approach, as it defining feature is used so widely within CBT.

The specific treatment approach taught by the Human Givens for the treatment of PTSD is the Re-Wind technique; this was adapted from a Neurolinguistic Programming (NLP) technique for phobias adapted by Muss (1991), as cited by Rusch et al, (2000). The rationale for this treatment is that it allows the trauma memory to be processed from a raw sensory experience and allows it to be reprocessed and then stored as normal autobiographical memory without the strong emotional content, and that this then reduces the symptoms of PTSD. Rusch, et al (2000) point to the fact that Muss (1991) only offers anecdotal evidence of it effectiveness, However David Muss has recently written a paper with Aimee Utuza that looks at the treatment of traumatic memories in Rwanda with the Rewind technique (Utuza and Muss,

2010). This paper shows data that the technique reduced symptoms for many of the participants after a single session at two week follow up. However the data only suggests that the method may be beneficial and needs replication. The Human Givens training added the following key features of the CATT approach:

- It gave a approach that was guided by psychological research;
- It gave the model a cognitive behavioural approach;
- It gave CATT an approach that used imagery as a key therapeutic tool;
- It gave CATT a memory based model of PTSD.

The development of the technique through clinical experience.

The therapeutic approach of the Human Givens, was adapted for use with children, making use of the techniques learnt at the Institute of arts and therapy. This led to the creation of the character based imaginal reliving technique that is a key component of CATT in treating traumatised children. This involved asking the children to tell a story about their nightmare or upsetting experience using characters that they could make from pipe cleaners, paper and pens. Doing this from a time when they felt safe, through the traumatic scene, until a time when they felt safe again. This is done forwards and backwards several times fast until the emotional arousal drops in telling the story.

After this, a second imagery re-scripting stage is used, in which the child is asked to tell a new story using the characters that would make it better, or feel different. The child is encouraged to select a new title, and often involves

creating a new character; to create a more empowering fantasy based on the traumatic memory.

This combination of: imaginal reliving to reduce the emotional arousal of the traumatic memory; and the imaginal rescripting to leave the child with more positive and empowering cognitions; was found to be very beneficial to traumatised children.

In summary clinical therapeutic experience added the following elements to the CATT approach:

- It added a structured arts based imaginal reliving technique for children for reducing emotional arousal of memories
- It added a structured, arts based, imaginal rescripting technique for developing more empowering or positive cognitions that are created by the child.

Development of CATT through training in Rwanda

The next stage in the development of the CATT technique came when the originator was invited to go to Rwanda where a course had been set up to teach the Re-wind technique to a local Rwandan NGO (REACH Rwanda), that worked in communities on peace and reconciliation. They had specifically asked for support for children. This led to a formalising of the CATT method. Up to this point it had been an individual approach to therapy with traumatised children.

CATT was formally created out of this therapeutic approach in to a model that would be possible to teach it to lay counsellors; to use with the children with

whom they worked. It was delivered as part of a three day course that covered the Human Givens principles and the re-wind technique for adults. The feedback from the participants was very positive. All the participants were able to use the technique to tell their stories. Although participants were asked to use memories that weren't too painful, many of the participants recounted events that they had experienced during the genocide. The participants were able to tell the story and to rescript their narrative (Brooks and Raby 2007).

Following the first day of the training course, the participants sat up late into the night, discussing their experience during the genocide using their characters (many of the adults had preferred to use CATT with their own traumatic memories as opposed to the re-wind). This was the first time that many of the participants had been able to talk their traumatic memories of the genocide and it aftermath.. The NGO were so pleased with the training that they asked if it could be repeated.

A second course was delivered and it was also well received. As a result of a further request for more CATT training by Reach Rwanda, Luna Children's Charity was established to deliver the approach. It was decided that the best methodology for delivering the method more widely was through a train the trainers model. The start was to train therapists in the U.K., who could then travel out to Rwanda in order to train frontline staff as lay counsellors. These counsellors would then deliver to children they already knew, and with whom the children felt safe. This was seen as both a way to empower communities, and to offer a sustainable model of support for local children.

In summary the experience of delivering training in Rwanda led to the following beliefs about the CATT model:

- That there is a need for trauma focused interventions in Rwanda
- That CATT is applicable in Rwanda, and to the extremely traumatic experiences of people there.
- That there is a particular need for interventions for children in Rwanda
- That the need for trauma therapy requires a model that can be rolled out by local lay counsellors, due to the shortage of mental health professionals

Aims and objectives

Hypothesis

The hypothesis of the evaluation was that the course was effective in teaching a technique that enabled participants to access traumatic memories, and that the exercise using the characters to relive and then re-script the memory would reduce their emotional arousal, enabling them to create a more positive or empowering version that was less distressing. It is proposed that the structure of the course will allow a structured narrative to be created through which sensory memories can be evoked and integrated. It is also proposed that the structure will enable this process to take place in a way that reduces the risk of emotional over arousal and dissociation.

The second element of the hypothesis was that the trained therapists would then be able to apply the technique successfully in their therapeutic practice, following the course, because it was designed to be straight forward and simple to apply, as well as being acceptable to children.

Methodology

Service Evaluation

The data used for this project was collected as part of a service evaluation. The data gathered comes from the experiences of participants on a two day training course that teaches the CATT method to trained therapists. The course was designed to teach trainees, an approach and methodology to treating traumatised children and the specific method of creating characters to relive the story, without becoming overly aroused, and to re-script the story in a more positive or empowering way.

The purpose of the evaluation was to assess the effectiveness of a two day training course designed to teach the methodology, approach and application of CATT. In particular it was important to capture the effectiveness of the course in teaching trainees the specific character based reliving and re-scripting technique that is seen as the core active element of the approach in targeting traumatic memories. This project aims to use the available data to quality assure the training. That is, does it do what it is designed to do? The training was originally designed to teach a technique that lay counsellors in Rwanda could use with traumatised children that they work with in their roles, as teachers or workers in orphanages. The course has since been delivered

to trained therapists in England, on three courses in 2010. The aim of these courses was to equip trainees with the overall approach to CATT, as well as teaching imaginal reliving and re-scripting technique. The course was designed to give trainees the skills, knowledge and confidence to apply CATT as a standalone treatment, or as a complementary element of their therapeutic work, with children affected by trauma. It was the effectiveness of these courses that the evaluation was designed to assess.

Participants involved in the evaluation

The data used was collected as part of a service evaluation by Luna Children's Charity. The data collected came from four (N=4) female trained arts therapists who attended a two day training course early 2010. Over fifty people had attended three CATT training sessions over the previous six months. These were invited to apply to become volunteers and attend a train the trainers course so that they could teach the method to lay counsellors in developing countries. There was an application procedure that they underwent and the most experienced therapists were invited to attend the course. They were all qualified arts therapists with over five years post qualification experience. Six places were offered, but only four therapists attended, with one male and one further female dropping out before the course, at which the evaluation questionnaire was distributed.

Measures used

Questionnaire design

A questionnaire was created to try and capture the key elements of the course. These were designed with a quality assurance methodology in mind. The focus was on capturing whether the course did what it was designed to do. The key element being: did the course equip trainees with a new therapeutic tool that they could apply in their therapeutic work with children or young people? This was then broken down into particular elements to allow for a more nuanced assessment of where it was working and any blockages or problem that they had found in using the new method.

A section of the questionnaire looked specifically at cases where they had used the method, looking at diagnosis or presenting problems of patients, the specific memories that they used the method with and the how the stories were re-scripted. An additional question was added to try and capture symptom reduction or improvements seen in their patients following treatment. A question was also added to see whether the treatment had been applied in isolation or in conjunction with other therapeutic methods. The questionnaire is included in the appendix.

Ethical considerations

As a service evaluation this project did not have to seek specific ethical approval. The data used was all collected for the specific purpose of

evaluating an existing service: a two day training course for therapists. Additional data that was collected through the video recording of training sessions was not used as permission had not been sort from trainee for it to be used in this way. As a result, the data that has been chosen is not necessarily the most robust available for the evaluation. In addition to this, trainees on CATT courses have shared their experiences of its use in their clinical practice through feeding back case studies. This would again have provided valuable data in this project but was also rejected as it was felt that permission should be sort from the children and their parents or carers for an anonymised case study to be used.

Procedure

The data collected was built around the delivery of a two day training course. In order to contextualise the data and the processes that led to their collection it is necessary to outline the course structure and content that was delivered.

A two day, six hour training course was delivered teaching CATT following a set course programme. The slides for the course doubled as handouts and were given to the participants.

The course is delivered through a combination of lecture style presentation of information; as well as experiential learning through practicing using the active imagery techniques in pairs' both as therapist and as client on their own traumatic emotional memories.

The course is designed to teach a full approach to treating children and young people suffering from the symptoms of post traumatic stress disorder.

The taught case formulation and treatment plan covers a series of element that are designed to be used sequentially. The full description is included as an appendix. In brief these include:

- Identifying a comfortable setting for the child, based on their preference and availability of quiet space in their location.
- Ensuring a sense of safety in the therapeutic setting. Including letting the child choose where they sit and where their therapist sits, as well as making any adjustments to the space that makes them feel safe.
- Systemic work with those in sustainable relationship with the child. To identify with the child adults who can support their treatment and support
- Psycho education about PTSD, causes, symptoms, and treatments
- Identifying presenting difficulty in a child centred way, upholding children's rights principles.
- Needs assessment for resilience building and sustained mental well-being looking holistically at their current circumstances
- Set and agree goals for therapy
- CATT Trauma treatment on traumatic memories
- Re-scripting
- Rehearsal using guided imagery of situations or places that they had previously been avoiding
- Trial and gathering of evidence to ensure recovery
- Return to need assessment and review any other presenting difficulties

The trainees were all taught through an experiential approach in practicing the technique during the training course. As the Imaginal reliving and re-scripting element of CATT forms the centre of the evaluation, it is necessary to describe this element of the course in detail.

Full description of the reliving and re-scripting element of the CATT training course.

The participants work together in pairs, to practice the protocol that they would use when working with a child. They are asked to work on something genuinely traumatic, or just embarrassing, so their partner has a real opportunity to look out for 'hotspot' reduction and sees the technique being effective with direct feedback.

The instructions they have for the trauma treatment is:

Explain to your partner that you have ascertained why they are there and know something has happened to them. However, you don't want them to tell you anything about it just yet, or think about it themselves in too much depth. What you want them to do is to glance back very fast, enough to think through who was there and write a list (or you write a list for them) of people who were present. Once they have written a list (logical part of the brain should be working, not emotional) ask them to add to the list if there were any strong smells they remember, colours, sounds etc and whether it was night or day. If any of this evokes any emotion, stop. It should be a methodical list making exercise, not an opportunity to reflect. Do not enable them to discuss it at all, or start to go in to a trance state. If they do, quickly encourage them out of it,

as it may be detrimental. If they are unable to undertake the list making, just ask them to go and make the characters that were present during the event. Otherwise, once you have the list, ask them to take their list and make all the characters and sensory elements they are able to using the craft materials available (encourage them to make models of important elements such as key smells as this help will evoke these sensory elements of their memory which will then make it more likely to include it in the story telling, which in turn will mean that they are able to process more information, causing less triggers in the future).

Next, you are going to ask them to select a safe place, at the start of the event; this needs to be a time when they felt safe, and nothing had yet happened. Then they need to tell you what the safe place was at the end of the event. There may have been multiple events, but there will have been, at least, moments in time when the person knew that they were alive and breathing and that they were not indeed dead. So, even in extreme circumstances there are times that can be found that can act as ‘safe places’. They need to choose a safe place at the end. Feed back to them what their safe places are to ensure you have this right. It is important to do this because these act as anchoring points and if someone does, for some reason become emotionally aroused it is important that you can direct them to those safe places. The more you know about these, the easier this will be to do.

Ask them to choose a title, related to the event; such as ‘the earthquake’ or ‘the fire’. Once they have done this, tell them that what they are going to do it tell you the story of ‘the earthquake’ (or whatever it is), using the characters and things they have made, starting from the safe place at the start (describe

it to them) and ending with the safe place at the end (describe it to them. Explain that you were not there, but you will be able to help them, if they tell you it in as much detail as possible, using the characters. They are not to look up whilst doing it, they are to make sure the characters are moving from the first safe place to the end, whilst telling, the whole story, and they are to tell it as quickly as possible. Ask them if that is okay and whether they have any questions, and then begin.

The risk factors are; if they stop moving the characters. If this happens, don't touch the characters (they tend to represent real people, and children feel very invaded if you do so) but verbally prompt them by asking how they get from there to the final safe space. Remind them to use the characters to tell you. The other risk factor is if they look up and make eye contact. It is important and protective that they do this through the characters, and it makes it slightly more distant and manageable. Once they look up, it can become overwhelming, as it becomes about them, so encourage them to re-focus on the characters and use them to continue telling you. This may feel patronising, but it is protective and essential to avoid getting emotionally overwhelmed.

Whilst they are telling you forwards, look out for significant 'hotspots'. These will probably be easy to see as there will be increased heart rate, flushing, sweating on the nose or forehead, change of voice tone or wobbly voice etc. There may be just one or many, when they narrate the story the first time. DO NOT analyze, interpret, interrupt or discuss anything they say. Your only job is to facilitate them telling you the information. Discussion, and therapeutic dialogue, can take place at a later time, once all the information has been

processed, and they are able to discuss elements of what happened with out increased emotional arousal.

Once they reach the final ‘safe place’, tell them that they have done well, and that the hardest part is out of the way. Next you’d like them to do something quite odd, which is to tell you the story backwards from the end safe place to the beginning safe place, including all the elements. Add that it will help the brain to put everything in order, but that it should help reduce the emotional content because it is also confusing. You can remind them of elements and help in ordering the story; this shouldn’t feel meddlesome as you are only helping to include things that they had included in their original narrative. Ensuring that the backwards narrative is as full as the original will help to ensure that as much of memory of the event is processed in this confusing way. The aim is to create a near identical but completely reversed representation of the event including sensory memories.

When they have got to the ‘safe place’ at the start again, tell them they have done well and that you would like them to tell you the story once more, from beginning safe place to end safe place as fast as they can, using the characters; and this time to try to make it double the speed to the last time. Remember the risk factors, to becoming over aroused, as before.

This time there should be a reduction in hotspots (e.g. 3 the first time, 1 the second time), or a reduction in the emotional arousal at the moments of greatest distress. It is important to make not of these as they can indicate the kind of cognition or emotions that the child is struggling with.

If they leave anything out in the going forwards, this is probably due to the fact they have processed it and no longer see it as significant. Never interrupt or

comment during the forwards story. When they reach the end thank them, and then ask them to repeat telling the story backwards once more; from safe place to safe place. In the backwards story, if you feel they have left anything out, you may remind them. This is because the brain is trying to do something confusing and sequential already, and it is therefore less likely to become emotionally overwhelmed.

When they reach the start point safe place thank them, and then get the child to repeat the whole process one last time. As they do this, there should be no emotional distress at the previous time hotspots in the forward narration. If this is the case thank them, and then go backwards one last time. Always end on a backwards story as it is a bit like spring cleaning and processes anything left over. If there was a hotspot left the third time, repeat one final time until there is not one. It should flow fast and easily, with out hotspots from start safe place to end safe place and backwards the same on the time you choose to finish.

In some cases, the story may not go faster the second time, and there appears to be all sorts of new information, for which you do not have characters or things prepared. This seems to happen when there has been some amnesia in response to trauma, and once processed the first time, it allows the brain to remember more. If this happens grab me, for the sake of this exercise! In real life if this happens, each time you must begin again. Tell them it is great you have new information as it means their brain is working hard to process the other events and has been successful, making more space for new memories (psychoed) but that means, you must get those characters/ things made so you can do it properly, so take a break, make any

extra and then begin again, treating the first run through as the first time they have told the story (as there won't be a reduction in emotion yet because this material is fresh and they haven't told this story before). This might happen a few times in these rare cases, which is why for this element of CATT it is worth planning a 90 minute session, if not 2hrs, to allow for this to happen and still complete the technique with in the timescale.

Re-scripting

Once you have completed the process, tell them you understand that they have been through something difficult/ upsetting/ traumatic and there is nothing that you can do about that. But that the technique will help them to find things easier and that surviving what they have been through (if this is appropriate) has no doubt made them a stronger person.

Explain that now you are asking them to do something different now, something you understand couldn't actually have happened at the time. What you want them to do it think about their first story for a moment and this time think through a new, imaginary character, who could enter the story at any time, and create a different, better outcome, or say or do something that would make them feel differently about what happened. If there was a clear cognitive message in the first one that they actually say (not that you interpret) you could after the first story ask them what they now think of that, and in the reframing version ask them to introduce an imaginary character who could come in and specifically deliver them a different message at that point).

Ask them to go and make the character. Make sure it is either an imaginary character (like Harry Potter or Superman) or a character that couldn't possibly have actually been there, as you don't want them to reflect on why actual

people didn't behave differently at the time. Then ask them to give a new title for this story (e.g. the day the earthquake happened, which I couldn't stop, but Superman could). Ask them to tell the new story for you from start to finish. (no need for safe places or going backwards, as this isn't real so there is not the same risk and there is nothing to process. Thank them at the end and ask them how that felt. Allow them to keep the new character. Children often find it gives them strength when visiting places that would previously cause distress, or they put it next to their beds; I have found that this helps to reduce nightmares.

The only time there is resistance to doing this in the same session as the fist part of the technique, is when, upon reflection and when they are able to think more objectively about the incident after the technique, there is strong emotion which needs to be explored; anger, hatred, loss etc. When this is the case, it may be worth putting additional sessions in to facilitate this before moving on to the re-scripting part of the technique.

Questionnaire distribution and completion

The evaluation questionnaire was handed out to participants at a subsequent train the trainers, course for volunteers who wanted to teach the methods to lay counsellors in developing countries including a course to be delivered in Rwanda in October 2010 in partnership with REACH Rwanda, a Rwandese NGO that works to support peace and reconciliation.

The questionnaire was handed out on the second day to trainees, to fill in during their afternoon break, and collected in afterwards. The questionnaire

was filled in three months after the participants had received their two day CATT training.

Tabulated results from the questionnaire about Therapists experience of CATT training and delivery

question	Therapist 1	Therapist2	Therapist 3	Therapist 4
After attending the two day training course in CATT, did you feel confident enough to use it in your practice?	yes	yes	Yes- not extremely confident, but enough to start out using it.	No!
Have you used CATT to treat children and young people that you work with, if so, with how many people have you used it?	3	One child x 2 events	Yes- 2 only	NO
Was CATT acceptable to the children you worked with/ did any children find it too hard or unpleasant to use?	All 3 found it quite difficult but managed to complete + expressed relief after	They enjoyed it	1 absolutely, actually enjoyed it 2 difficult, but more due to other factors, situation not really secure enough to address trauma	N/A
Did the children or young people find the method simple to follow?	All slightly confused by rewind part of process	yes	yes	N/A
Did you have any difficulties using CATT and if so what were they?	Sometimes difficult to not ask questions/ comment during process-though managed not to	Just my confidence- the training is sufficient	no	I used it on a friend only
If you have been using other trauma treatments how does CATT compare, and what are the main differences if any?	CATT feels less intrusive than NET therapy in many ways, though I also found NET to be useful, depending on particular client. Some YP have liked testimony/document aspect of NET and having read back to them. I liked making/play/ creative bit of CATT	N/A	Very structured, this is quite helpful. A bit difficult to integrate but getting there.	
What have you found most useful in working with CATT to treat trauma?	- creating characters and not feeling need to intervene/ask re-story. -letting child be in control. - changed/new ending v. helpful	Only used with one child who was physically abused.	Too early to say, sure I'll be able to after 20 patients	
What is your training background, and how many years post qualification experience have you got?	Art psychotherapy. 9 years	Art therapist; 5 years post qualification	Art therapist, Nine yrs experience	

Tabulated questionnaire results from using CATT in Clinical practice

Age and Gender	Was CATT used alone or Combined with other Methods?	Presenting Problem	Type of Trauma	Number of Sessions	Memory, Intrusive Image Worked With	How it Was Changed	What has Changed in the Patients Symptoms or Functioning?
1 M12	Used with art therapy	PTSD Soiling Wetting Aggression pyromania	Complex abuse DV Mother having heart attack	2 CATT sessions	Mother having heart attack in car child had to drive to hospital	Mum bought a take away, stayed in and no one had a heart attack or emergency	Feels slightly less worried about, not started any fires(last six months, No fights
1 M10	Used with art therapy	PTSD	Honour killing and sister kidnapped by uncle. Car bomb involving brother and father	2	Day mother murdered and sister taken	Learning mentor as super hero flew family to safety	Able to talk gradually about incident in therapy Less nightmares
1 F8	Just CATT	PTSD	Mass wasp attack	1	Wasp nest attack	Magic butterfly beat up the wasps	Sleep better no nightmares not as fearful of wasps
2 M10	Art therapy first then CATT added later	PTSD Flashbacks And frozen states in class and at home	Physical abuse step father	2 to date, more to come	The abuse (2 incidents so far)	A big hero came and ate the abuser up and turned him into pulp	Reduction in flashbacks and tears and freezes but still more traumatic experiences to deal with
3 M10	Multi disciplinary inpatient treatment	PTSD Violent outbursts, physical attacks on mother and care givers, social anxiety and phobias	2	5	Phobia of having blood taken	blank	Now able to have blood tests without fear
3 F16	CATT/ AT	PTSD Flashback, Intrusive memories, Poor concentration.	1	6	Actual attack	People intervened	Will see patient after the summer holiday

Treatment of results and analysis

The data collected through the questionnaire provided information directly related to the aims and objectives of the study. The approach to the analysis of the results is shaped by key questions of the study. That is, did the training teach techniques that the trainees could use in their clinical practice with traumatised children? The findings were that three out of the four therapists felt confident using the technique after the training, and that between these three; six children were treated with the CATT approach.

The second aim was to see whether the training enabled the trainees to use the imaginal reliving to help children with traumatic experiences. The six cases described, include, murder and kidnap, heart attack, wasp attack, physical assault, domestic violence, and blood test. Of these, five are clearly traumatic events and one relates to a phobia, although all six cases were listed as having a PTSD diagnosis.

The third analysis of the data was to see if the imaginal re-scripting element of the technique was used by the therapists on the evoked traumatic memories. Of the six cases that are described, five examples were given of how imaginal rescripting was used, one of the questionnaires left this section blank.

Of changes that the children made to their narrative, all led to more positive endings. These were as follows:

- Mum bought a take away, stayed in and no one had a heart attack or emergency

- Learning mentor as super hero flew family to safety
- Magic butterfly beat up the wasps
- A big hero came and ate the abuser up and turned him into pulp
- People intervened

The discussion will be guided by these elements of the results, because they provide data that is relevant to key aims of the project. This follows the training course through the therapists' experience, to the delivery of the CATT imagery techniques with traumatised children in clinical practice.

Discussion

The results were extremely positive in their findings. The questionnaire date clearly showed that therapists who had attended the two day CATT training course were then able to use the techniques that they learnt in their clinical practice with traumatised children. This is a positive initial finding as it supports a key element of the CATT model and delivery approach. Due to the small number of therapists whose feedback was used for the project, it is not possible to assess the effectiveness of the training course in a quantitative way. What this project can show is a clear route through learning new techniques in training, and going on to use them in clinical practice with traumatised children.

Although one of the participants lacked the confidence to use the CATT techniques in practice, it is very positive that the other three all felt able to. However, even though these therapists felt confident enough to apply the approach, the next stage was put this into practice. This offered two potential barriers. These were, would the children that they worked with be comfortable using the CATT imagery techniques, and could the therapist apply effectively. Below are excerpts from the questionnaire describing the children's experience of the CATT imaginal techniques:

- All three found it quite difficult but managed to complete and expressed relief after
- They enjoyed it
- 1 absolutely enjoyed it. 2 difficult more due to other factors. Not really secure enough to address trauma.

These showed a very mixed experience for the children in using the technique. What is surprising is two of the children positively enjoyed the process. This is unexpected bearing in mind that it deals with traumatic memories. The most important finding is that all the children were able to complete the reliving exercise. Although one of the therapists described that the children she worked with found the rewind of the narration element confusing.

In the light of current evidenced based approaches to the treatment of PTSD in children, these findings are supportive of the CATT imaginal techniques. EMDR, KidNET, and trauma focused cognitive therapy all focus on methods to allow children to relive traumatic experiences. The data from the project suggests that CATT is an approach that enables children to do this. The existing effective treatment approaches to working with PTSD in children also work at processing the traumatic memory and updating or changing cognitions. The data from the project suggests that the re-scripting element of the technique enabled the children to do this and find more positive endings. EMDR (Ahmad et al,2007), KidNET (Neuner et al, 2008) and Trauma focused therapy (Smith et al ,2010), all use different methods in achieving these objectives. The emphasis of on quick reliving, and a focus on avoiding high levels of distress put CATT more closely in line with EMDR and the Ehlers and Clarke approach applied to children (Smith et al, 2010). These approaches use reliving minimally to both help reduce the distress associated with memory and to help create more positive cognitions. The prolonged exposure approach even in its shorter KidNET format (Neuner, et al 2008), still focuses on eliciting distress through exposure.

The data suggests that the CATT technique was able to allow children to access traumatic memories through the character based exercise, and that this did not cause them to become too distressed, with two of them actually enjoying the process.

EMDR works through the addition of bilateral distractions during brief reliving. Brewin et al, (2010), suggest that this may be due to the additional demands on attention. The CATT protocol requires the child to physically narrate the events using the characters. This is likely to place similar demands on the attention of the child and thus use a similar mechanism to reducing the emotional arousal associated with recall of the traumatic event.

CATT is designed to enable children to develop more positive and empowering cognitions, through the treatment, to help reduce symptoms. This is done quickly in a single session. As an active imaginal re-scripting technique this puts CATT in line with Rusch et al (2000) who found that patients were able to achieve rapid relief from traumatic images. They seemed to achieve this by creating fantasy alternatives that were often amusing.

In terms of theory supporting CATT, Brewin et al,(2010) suggest that trauma is stored more heavily in sensory representations and these need to be complemented with contextual representations to reduce the emotional arousal. The CATT technique works in way that would be supported by this model. It gets children to create logical lists of the event and to narrate it in a clear structure from beginning to end. Brewin et al, (2010), argue that this needs to be done whilst evoking the sensory elements of the memory. The CATT protocol actively gets the children to bring up as much sensory

information about the events as possible. Brewin et al (2010), argue that it is by pairing these memories that inhibition of the emotional arousal is achieved. Cognitive therapy and EMDR actively attempt to update cognitions and this is also a key element of the CATT protocol.

What this paper has suggested is that CATT is treatment protocol that includes elements that are necessary for an effective treatment of PTSD.

The limitations of this study is the small number of therapists who took part, meaning that the effectiveness of the training course could not be assessed quantitively. In addition the treatment was applied in conjunction with other methods so it would have been impossible to isolate the effect of the treatment. Additionally pre and post treatment assessment of PTSD symptoms was not collected.

Conclusion

This project aimed to assess the effectiveness of CATT as a potential treatment approach to the treatment of PTSD in children in Rwanda. The findings are that the training was successful in teaching therapists techniques that they could use in their work with traumatised children. Future research is needed in assessing the efficacy of the approach using pre and post treatment evaluation, ideally with a six month follow up.

At present the approach is not manualised, and therefore this would be a blockage to it being rolled out at present. However the experiences of training in Rwanda suggest that the approach is possible to deliver there.

Future recommendations would be to focus on developing the CATT protocol and deliver it in a field setting, using a manual and then collecting good quality

data on its efficacy through the use of pre and post treatment measures. It is only through delivering it in its intended context that the potential of the CATT protocol as a treatment approach for Rwanda can be really assessed.

Bibliograpphy

Ahmad, A. and Sundelin-Wahlsten, V. (2007) 'Applying EMDR on children with PTSD.' *Eur. Child Adolesc. Psychiatry* (2007). DOI 10.1007/s00787-0646-8

Amaya-Jackson, L., Reynolds, V., Murray, M. C., McCarthy, G.,Nelson, A., Cherney, M. S., Lee, R., Foa, E., March, J. S. (2003) 'Cognitive- Behavioural treatment for Pediatric Posttraumatic Stress Disorder: Protocol and Application in School and Community Settings'. *Cognitive and Behavioural Practice* 10, 204-213

Arntz, A., de Groot, C., Kindt, M. (2005) 'Emotional memory is perceptual'. Journal of Behavior Therapy and Experimental Psychiatry 36, 19-34

Arntz, A., Tiesema, M., Kindt, M. (2007) Treatnment of PTSD; 'A comparison of imaginal exposure with and without imagery rescripting'. *Journal of behavioural Therapy and experimental Psychiatry* 38, 345-370

Brewin, C. R. 'Understanding cognitive behaviour therapy: A retrieval competition Account'. *Behaviour research and Therapy* 44 (20060 765-784

Brewin C. R. *Post-Traumatic Stress Disorder: Malady or Myth* . London. Yale University Press.

Brooks, M., Raby, C. (2007) ' " There was no place of safety": PTSD in Rwanda' *Human Givens.* Volume 14, No 3

Cohen, J. A., Deblinger, E., Mannarino, A. P., Steer, R (2004). 'A multi-site, randomised Controlled Trial for children with Abuse-related PTSD symptoms' *J AM Acad. Child adoles.c Psychiatry*. April: 43 (4): 393-402

Cohen, J. A., Scheeringa, M. S.(2009) 'Post-traumatic stress disorder diagnosis in children: challenges and promises. *Dialogues Clinical Neuroscience*. 11(1):91-99

Ehlers, A., Clark, D. C. (2000**)** 'A cognitive model of posttraumatic stress disorder'. *Behaviour Research and Therapy* 38, 319-345

Ehlers, A., Clark, D. M., Hackmann,A., McManus, F., Fennell,M. (2005) 'Cognitive therapy for post-traumatic stress disorder: development and evaluation' *Behaviour Research and Therapy* 43, 413-431

Engelhard, I. M., Van den Hout, M. A., Janssen, W. C., Van der Beek, J. (2010) 'Eye movements reduce vividness and emotionality of "flashforwards"' *Behaviour Research and Therapy* 48, 442-447

Gardner, D., Harper, P. (1997) Using metaphor and imagery. An illustrative case study of childhood anxiety. In *The therapeutic use of stories*. (eds Keder, Nath, Dwivedi) Chapter 6. London:. Routledge

Giannopoulo, J., Dikaiakou, A., Yule, W. (2006). Cognitive behavioural group intervention for PTSD symptoms in children following the Athens 1999 earthquake: A pilot study. *Clinical Child Psychology and Psychiatry*, 11, 543-553.

Grey, n., Holmes, E. A. (2008**) '"**Hotspots" in trauma memories in the treatment of post-traumatic stress disorder: A replication'. Memory, 7,788-796

Griffin, J., Tyrrell, I. *Human Givens: A New approach to emotional health and clear thinking*. Chalvington. HG Publishing.

Grunert, B. K., Smucker, M. R., Weis, J. M., Rusch, M. D. (2003) 'When Prolonged Exposure Fails: adding an imagery-based Cognitive Restructuring Component in the treatment of Industrial accident Victims suffering from PTSD'. *Cognitive and Behaviour Practice* 10, 333-346,

Grunert, B. K., Weis, J. M., Smucker, M. R., Christianson, H. F. (2007) 'Imagery Rescripting and reprocessing therapy after failed prolonged exposure for post-traumatic stress disorder following industrial injury'. *Journal of Behaviour Therapy and Experimental Psychiatry* 38, 317-328

Holmes, E. A., Mathews, A., Dalgleish, T., Mackintosh, B. (2006) 'Positive Interpretation Training: Effects of Mental Imagery Versus Verbal Training on Positive Mood'. *Behaviour Therapy* 37, 237-247

Holmes, E. A., Arntz, A., Smucker, M. R. (2007) 'Imagery rescripting in cognitive behaviour therapy: Images, treatment techniques and outcomes'. *Journal of Behavior Therapy and Experimental Psychiatry* 38, 297-305

Hunt, M., Fenton, M. (2007) 'Imagery rescripting versus in vivo exposure in the treatment of snake fear'. *Journal of Behavior Therapy and Experimental Psychiatry* 38, 329-344

Jelinek, L., Stockbauer, C., Randjbar, S., Kellner, M., Ehring, T., Moritz, S.(2010) 'Characteristics and organisation of the worst moment of trauma memories in posttraumatic memories in posttraumatic stress disorder'. *Behaviour Research and Therapy* 48, 680-685

Maslow (1968), A. H. *Towards a psychology of being*. John Wiley and Sons.

Neuner, F., Catani, C., Ruf, M., Schauer, E., Schauer, M., Elbert, T. (2008) 'Narrative Exposure Therapy for the treatment of traumatized Children and adolescents (KidNET)': from Neurocognitive Theory to field intervention. *Child and adolescent Psychiatric Clinics of North America* 17, 3, 641-664

National Institute for Clinical Excellence(NICE, 2005). *Post Traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care* (Clinical Guidline 26). London: Gaskell and the British Psychological Society

Olij, J. (2005) 'Trauma awareness, healing, and group counselling in secondary schools'. *Intervention*, volume 3, number 1, 51-56

Onyut, L. P., Neuner, F., Schauer, E., Ertl, V., Odenwald, M.,Schauer, M., Elbert, T.(2005) 'Narrative Exposure Therapy as a treatment for child war survivors with posttraumatic stress disorder: Two case reports and a pilot study in an African refugee settlement'. BMC psychiatry (2005) doi:10.1186/1471-244X-5-7

Onyut, l. P., Nuener, F., Ertl, V., Schauer, E., Odenwald, M., Elbert, T. (2009) 'Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement-an epidemiological study'. *Conflict and Health*. 3:6

Payne, C., Edwards, D. (2009) 'What services and supports are needed to enable trauma survivors to rebuild their lives/ implications of a systematic case study of cognitive therapy with a township adolescent girl with PTSD following rape'. *Child Abuse Research in South Africa*, 10(1):27-40

Ponniah, K., Hollon, S. (2009) 'Empirically supported psychological treatments for adults acute stress disorder and posttraumatic stress disorder: A review'. *Depression and anxiety* 26: 1086-1109

Powers, M. B., Halpern, J. M., Ferenschak, M. P., Gilihan, S. J., Foa, E. B. (2010) 'A meta-analytic review of prolonged exposure for posttraumatic stress disorder'. *Clinical Psychology Review* (2010), doi:10.1016/j.cpr.2010.04.007

Raby, C. (2003) *Project X: A journey through the development of an inner-city*

Project for children with extreme Emotional and Behavioural Need. Masters thesis, University of Exeter

Rubin, D. C., Berntsen, D., Klindt Bohni, M. (2008) 'A Memory-Based model of Posttraumatic Stress Disorder: Evaluating Basic Assumptions Underlying the PTSD Diagnosis'. *Psychological Review* volume 115, issue 4, October

Rusch, M. D., Grunert, B. K., Mendelsohn, R. A., Smucker, M. R. (2000) 'Imagery rescripting for recurrent, distressing images'. *Cognitive and Behavioural Practice* 7, 173-182

Schauer, E., Neuner, F., Elbert, T., Ertl, V., Onyut, L. P., Odenwald, M., Schauer, M.(2008) 'Narrative Exposure Therapy in Children: a Case Study'. *Intervention* 2, 1,18-32

Smith, P., Dyregrov, A., & Yule,W. (1999). *Children and disasters: Teaching recoveringtechniques.* Bergen: Children and War Foundation.

Smith, P., Yule, W., Perrin, S., Tranah, T., Dalgleish, T., Clark, D. M. (2007) 'Cognitive-Behavioural Therapy for Ptsd in Children and Adolescents: A Preliminary Randomized Controlled Trial'. *J. Am. Acad. Child Adolesc. Psychiatry*, 46(8):1051-1061.

Smith, P., Perrin. S., Yule, W., Clark, D. M. (2010) *Post Traumatic Stress Disorder, Cognitive Therapy with Children and Young People*. Hove. Routledge.

Spoormaker, V. I., Montgomery, P. (2008) 'Disturbed sleep in post-traumatic stress disorder: Secondary symptom or core feature?' *Sleep Medicine Reviews* 12, 169-184

Stallard, P. (2006) 'Psychological interventions for post- traumatic reactions in children and young people: a review of randomised controlled trials'. *Clinical Psychology Review* 26, 895-911

Wheatley, J., Brewin, C. R., Patel, T., Hackman, A., Wells, A., Fisher, P., Myers, S. (2007) '"I'll believe it when I can see it: Imagery rescripting of intrusive sensory memories in depression'. *Journal of Behaviour Therapy and Experimental Psychiatry* 38, 371-385

Zraly, M., Nyirazinyoye, L. (2010) 'Don't let the suffering make you fade away: An ethnographic study of resilience among survivors of the genocide-rape in southern Rwanda'. *Social Science and Medicine* 70, 1656-1664

Appendix 1

CATT Research

1. After attending the two day training course in CATT, did you feel confident enough to use it in your practice?

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2. Have you used CATT to treat the children and young people that you work with, and if so, with how many people have you used it?

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3. Was CATT acceptable to the children you worked with/ did any children find it too hard or unpleasant to use?

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4. Did the children or young people find the method simple to follow?

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5. Did you have any difficulties using CATT and if so what were they?

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6. If you have been using other trauma treatments how does CATT compare, and what are the main differences, if any?

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7. What have you found most useful in working with CATT to treat trauma?

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8. What is your training background, and how many years of post qualification experience have you got?

Please fill in the table below to provide more detail about the cases in which you have used CATT

Age and Gender	Was CATT used alone or Combined with other Methods?	Presenting Problem	Type of Trauma	Number of Sessions	Memory, Intrusive Image Worked With	How it Was Changed	What has Changed in the Patients Symptoms or Functioning?
