INTerventions in the aftermath of disaster
Interventions in the aftermath of disaster

The European Network for Traumatic Stress (TENTS), funded by the European Union, aims to develop European wide networks of expertise on psychosocial care and posttraumatic stress treatment for those affected by disaster. TENTS also aims to increase post disaster mental health service capacity by helping to develop them into more evidence based and effective services. To facilitate this, the TENTS guidelines have been developed for the delivery of post disaster psychosocial care in all European countries without being made mandatory.

This booklet introduces a range of interventions for those affected by disaster that are consistent with the TENTS guidelines and other evidence based recommendations (e.g. NCCMH, 2005). The interventions described are: community based interventions, trauma focused psychological treatments and pharmacological treatment for adults with PTSD, and interventions for traumatized children and adolescents.

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**Community Based Psychosocial Interventions**

Community based interventions are all activities that facilitate normalization of social, family and individual psychosocial functioning in a community affected by a disaster. They promote a sense of safety, self and community efficacy/empowerment, connectedness among community members, calming of those who are very distressed and increasing hope in recovery of individuals and the community.

**Community interventions after a disaster include activities such as**

- Practical help given in an empathic manner, emotional support and initial reassurance of distressed individuals.
- Information provisions (e.g. regarding tracing family members, accessing temporary housing, food, social benefits, health services, legal advice and psychological help).
- Material assistance (e.g. providing housing, food, financial benefits, rebuilding infrastructure).
- Employment (e.g. retraining to increase employability and independence).
- Organizing memorial events and building monuments in conjunction with those directly affected.
- Facilitating mutual support and special interest groups.
- Providing psychosocial care interventions to the affected populations.

**Target groups for community interventions** are those directly involved and their families, witnesses and the personnel of agencies involved in the emergency response and recovery. They should have access to a range of psychosocial care interventions.

**Early practical and social support and psychosocial care** can have a pre-emptive effect and prevent development of longer term psychological problems.

**Psychosocial care** incorporates emotional and practical help. It ranges from providing immediate comfort and practical help through to longer term psychological support and specialist trauma care. Individuals will often receive considerable support from their family, friends and community. Any formal response is intended to complement this. All aspects of psychosocial care should only be provided with full consideration of individuals' wider social environment, especially their families and communities.

**The need for ongoing, medium and long-term psychosocial care** should be recognised from the outset. For most people involved in a disaster help may only be needed during the rescue phase and the immediate aftermath. However, there may be a need to establish a dedicated support team or referral services after an incident for up to three years, or even longer. Therefore, it is essential that plans are made and funding ensured from the outset.

**Illustrative community based psychosocial care activities include**

- Making people aware of the psychosocial help available without being intrusive, through communication channels including newspapers, television, radio and the internet.
- Launching a telephone helpline that provides emotional support and a website concerning psychosocial issues.
• Listening to, and absorbing, people’s accounts of the incident as well as helping to piece together the experience of the disaster.
• Providing education regarding reactions to trauma and how to manage them through leaflets describing some of the feelings commonly experienced by those involved in major incidents, promoting self help and giving contact numbers for those seeking help.
• Giving information on how to deal with problems arising from the incident (e.g. bereavement, strong emotions, family difficulties, specific fears, insomnia, and work problems).
• Making staff of the local health, social and educational services aware of possible psychopathological sequelae and the community model of care.
• Identifying those with psychosocial difficulties and assessing their need for more formal intervention.
• Ensuring access to specialist psychological and pharmacological assessment and management when it is required.
• Providing counselling and evidence-based treatment for those with specific needs by trained and supervised counsellors/clinicians.
• Maintaining proactive contact with those affected and their families (e.g. via the emotional support telephone helpline or a trauma counsellor).
• Developing local capacity to provide ongoing and long-term psychosocial services.

Highly vulnerable groups
Vulnerable groups after a disaster include those individuals that are especially dependent on family, community or professional support. These typically include:
• Children and adolescents who need more support, reassurance and increased attention during the disaster and its aftermath.
• The elderly, pregnant women and single parent families who are often more dependent on other people for services, and whose needs can be neglected during and after a disaster.
• People with chronic illness and health-related dietary needs may need special medical attention or assistance to access services.
• People who do not understand the local language, formal procedures or legal requirements (e.g. immigrants, minority group members).

Psychosocial care for disaster workers
Work in disasters places enormous pressures on carers and it is essential that their needs and limitations are not overlooked. Because of high workload, often poor working conditions and exposure to a large number of clients in distress, procedures need to be planned that help prevent burnout and vicarious traumatization. This will include regular rotation to ensure that individuals do not work for excessive periods, technical debriefing after completing their shifts, and support systems such as regular supervision, consultation with peers and outside consultants, techniques for building a supportive team spirit and cohesion.
References are provided at the last pages of this brochure.
Trauma focused psychological interventions for adults with PTSD

Treatments such as Cognitive Behavioural Therapy (CBT), Eye Movement Desensitization and Reprocessing (EMDR) and Brief Eclectic Psychotherapy (BEP) all focus on the memory for the traumatic event and its meaning. As a result, these interventions are referred to as trauma focused psychological treatments (NCCMH, 2005). Before introducing the trauma focused psychological treatments, the indications and cautions regarding the use of them are noted. Indications and cautions for trauma focused psychological treatments for children and adolescents and pharmacological treatment of PTSD are discussed in the final two sections.

Indications for trauma focused psychological treatments

- Clients suffering from acute or chronic PTSD.
- In case of multiple traumatic experiences or when co morbid disorders or social problems are present, trauma focused psychological treatments are not always contraindicated, however, extending the duration of treatment should be considered.
- Sessions should be offered on a regular and continuous basis (often weekly).
- The therapist should be the same person for all sessions.
- The therapies are usually and preferably individually focused, but there is evidence that group CBT can help.
- A structured protocol for all trauma focused psychological treatments should be used.
- Treatment should be delivered by competent individuals who have received appropriate training and are receiving appropriate supervision.

Cautions for trauma focused psychological treatments for adults

In general, trauma focused psychological treatments for adults are contraindicated or should only be used very cautiously as part of a comprehensive management plan for adults suffering from:
- severe depressive disorder.
- severe substance dependence or addiction.
- other kinds of severe anxiety disorders alongside PTSD (e.g. agoraphobia, panic disorder).
- severe personality disorders.
- psychotic disorders.
- severe dissociative disorders.
- suicidality.

Combining trauma focused psychological treatments and drug treatments for adults

- In general, trauma focused psychological interventions do not need to be combined with drugs, unless co morbidity or specific symptoms indicate the need for medication.
- Prescribing benzodiazepines or sleeping medications should be avoided if possible.
Cognitive Behavioural Therapy for PTSD

Cognitive Behavioural Therapy for PTSD is trauma focused, includes exposure to the traumatic event and targets the cognitive and behavioural avoidance in PTSD. It is a structured intervention that usually includes psycho-education, cognitive restructuring techniques and non-trauma focused elements such as anxiety management (e.g., relaxation techniques). Subtypes include exposure therapies such as Prolonged Exposure (PE) (Foa & Rothbaum, 1998; Creamer et al., 2007) that primarily focus on confrontation with frightening trauma-related stimuli (both imaginal and in-vivo) until anxiety subsides and cognition focused therapies such as Cognitive Processing Therapy (CPT; Resick & Schnicke; 1993) that primarily identify and target problematic cognitions relating to the trauma while adaptive cognitions are incorporated into imaginal reliving of the trauma.

Effectiveness

Trauma focused CBT (TF-CBT) has been consistently shown to produce clinically important effects on all measures of PTSD compared to wait-list, stress management, and supportive/non-directive therapies (NICE, 2005; Bisson et al., 2007). Trauma focused CBT is recommended as a first-line treatment for victims of disaster with acute or chronic posttraumatic stress disorder (PTSD).

Duration of the treatment

- 8-12 sessions of 45-60 minutes long when the PTSD has arisen from a single incident.
- If the traumatic event is being discussed sessions should be longer (90 mins).

Sessions

In the first sessions the following components are important

- Establishing a therapeutic alliance and psycho education about common reactions to trauma.
- Introduction to and teaching of relaxation techniques such as breathing retraining.
- Introduction of theoretical rationale of exposure-based therapy.

Exposure is usually performed in two ways

Imaginal exposure or narrative writing.

- Emotional and detailed recounting of
  - traumatic memory in the temporal order in which the events unfolded.
  - thoughts and feelings, either in one's imagination while giving a running commentary on what one visualises, or in writing.
- Recounting the trauma should be repeated until
  - it no longer evokes high levels of distress.
  - the trauma memories are experienced as memories rather than something happening all over again.In vivo exposure.
- Confronting the client with situations that he/she avoids because they are associated with the trauma and evoke strong emotions or physical reactions (e.g. driving a car again after being involved in an accident).
This is usually done in a graded manner.
• This aims to result in a realisation that the feared situation is no longer dangerous and that the anxiety about it does not persist for ever (Foa & Kozak, 1986).

Cognitive restructuring is achieved by
• Helping the client to identify and modify their excessively negative cognitions that lead to disturbing emotions and impaired functioning.
• Focusing on the identification and modification of misinterpretations that lead the client to overestimate threat that stems from interpretations of the trauma and its aftermath.
• Discussing the evidence for and against the interpretations.
• Testing out the predictions derived from the interpretations with the help of the therapist so that the client arrives at more adaptive conclusions.
• Encouraging the client to drop behaviours and cognitive strategies that prevent a disconfirmation of the negative interpretations.

Homework assignments include:
• Practising muscle relaxation or breathing techniques and imaginal and in vivo exposure.

In the final sessions treatment progress is evaluated by:
• Reviewing the techniques used in therapy.
• Evaluating their helpfulness.
• Discussing general termination issues.
Eye Movement Desensitization and Reprocessing (EMDR)

EMDR is a psychotherapeutic approach for reducing distress after traumatic experiences which disturbs everyday living. The core goal of EMDR involves the transformation of the dysfunctionally stored experiences into an adaptive resolution that promotes psychological health. EMDR aims to activate the ability to handle the distress of the traumatic memory and to decrease disturbed thoughts and emotions. It can also help the clients to think differently about themselves in relation to the traumatic memory.

Effectiveness

EMDR is an evidence-based method for treating PTSD (Bisson et al, 2007), recommended as a first-line psychological treatment for chronic PTSD (NCCMH, 2005) and has been found to be equally as effective as trauma focused CBT (Spates et al 2009).

Duration of the treatment

It has been argued that the duration of an average EMDR treatment for PTSD due to one core traumatic event can be relatively short. If EMDR is effective for the particular client this will show within one to two treatment sessions. For problems after a single trauma a limited number of sessions (on average 6 sessions) is often enough. However, length of treatment depends on complexity of trauma-problem.

Sessions

EMDR processing has an eight phase approach, with phases that share characteristics of many other forms of therapy and three unique EMDR elements of so called desensibilization, installation, and body scan (Spates et al 2009).

- Phase 1: history is taken, a treatment plan is prepared and the specific EMDR method is introduced.
- Phase 2: the client learns to understand how the PTSD symptoms are related to the traumatic experiences. Different types of stabilisation techniques are introduced and taught to enhance the client's feeling of mastery and control.
- In phase 3 the specific target memory is assessed. 

In the following order, the client is asked to:

- Focus on a specific traumatic memory.
- Identify the distressing image that represents the memory, the associated negative cognition and an alternative positive cognition.
- Identify emotions that are associated with the traumatic memory.
- Identify trauma-relevant physical sensations and their respective body locations.
- This process is quantified by use of subjective indicators and measures.
- Phase 4: the trauma memory is processed via a structured procedure of free association, integrating a dosed exposure:

  - The client is asked to hold the distressing image in their mind along with the negative cognition, emotions and associated body sensations, while tracking the therapist's fingers back and forward across the client's field of vision in rhythmic sweeps over approximately 20 – 40 seconds (bilateral tactile stimulation or sounds can be used as an alternative to eye movements).
The client is then asked to take a break and a deep breath before giving feedback to the therapist of any changes in images, sensations, thoughts or emotions that might have occurred.

This process is repeated and continued until the client no longer experiences any distress with the traumatic memory.

Phase 5: the processed traumatic memory is linked to the alternative positive cognition through continued bilateral stimulation, with the aim of enhancing the connection of positive neural networks to the original memory.

Phase 6: performing a body scan. The client is encouraged to scan the whole body to identify if there are any remaining tensions in the body that can be associated with the original traumatic memory. If there are any tensions the client is asked to focus on these while bilateral stimulation is added, until the tension has disappeared.

Phase 7: closure of the session. The therapist makes sure the client is stable enough to leave the session.

Phase 8: takes place at the next session and includes a follow up and a re-evaluation of the former processing.
**Brief Eclectic Psychotherapy (BEP)**

Brief Eclectic Psychotherapy (BEP) for PTSD is a short, problem-focused psychotherapy based on a combination of theories drawn from psychodynamic, cognitive-behavioural and directive psychotherapies. It aims to reduce PTSD symptoms in clients, help them integrate the traumatic event into their lives and to regain control. The BEP protocol was developed by Gersons in the 1980s and 1990s to treat PTSD in police officers (Gersons, 1989, 1992, Gersons & Carlier, 1994).

**Effectiveness**

RCTs have shown the therapy to be effective both in police officers and in a general population of PTSD clients with a variety of traumatic experiences (Gersons et al. 2000, Lindauer et al., 2005). Significant improvement in terms of biological parameters has also been found (heart rate response, cortisol levels, brain activity (Lindauer et al. 2003, Olff et al., 2007).

**Duration of the treatment**

- 16 sessions of 45-60 minutes

**Sessions**

Each session forms a carefully defined step in one of five therapeutic stages:

- **Psycho education (sessions 1-2):**
  Client and his or her partner learn to understand the symptoms of PTSD as dysfunctional, and caused by the traumatic event.

- **Imaginal exposure and use of memorabilia (sessions 2-6):**
  Imaginal exposure is focused on the suppressed intense emotions of sorrow. The exposure in BEP is different from the exposure in trauma focused CBT in the sense that in BEP the primary goal is to release intense emotions related to the trauma. Clients are exposed to different parts of the trauma in separate sessions. Memorabilia are used to stimulate remembrance of the traumatic event.

- **Letter writing, integration and providing meaning (sessions 7-12):**
  The letter is written to someone or an institution blamed for the traumatic incident. Afterwards the client is able to concentrate on what the impact of the trauma has been on their view of her or himself and on their world.

- **Farewell ritual (sessions 13-16):**
  The treatment ends with a farewell ritual in which the client, with their partner if possible, burn the letter and or mementos to leave the traumatic incident behind, allowing the client to turn to face life and the future, never forgetting what happened, but without it hampering their ability to continue their daily life.
The pharmacological treatment of PTSD

Drug treatments for PTSD should not be used as a routine first-line treatment for adults in preference to a trauma focused psychological therapy (NCCMH, 2005). If PTSD in adults is pharmacologically treated, the antidepressants paroxetine, mirtazapine, phenelzine and amitriptyline have been recommended above others (NCCMH, 2005). Hypnotic medication (benzodiazepines and non-benzodiazepines) is sometimes being used for sleep-disturbances in PTSD.

Indications for the pharmacological treatment of PTSD

Pharmacological treatment of PTSD in adults should be considered when/if:

- PTSD clients prefer not to engage in a trauma focused psychological treatment.
- PTSD clients cannot start a psychological therapy because of serious ongoing threat of further trauma.
- Trauma focused psychological treatment has resulted in little or no benefit.
- A clients ability to benefit from psychological treatment is decreased because of significant comorbid depression or severe hyperarousal (i.e., pharmacotherapy as an adjunct to psychological treatment).
- Treatment should be delivered by competent individuals who have received appropriate medical education.

Effectiveness

Of the pharmacological interventions, selective serotonin reuptake inhibitors (SSRIs) have been most researched with paroxetine having the most convincing level of evidence (NCCMH, 2005). It has been shown to be a well-tolerated drug that is mildly effective in reducing symptoms of all three clusters of PTSD compared to placebo in both males and females (Marshall et al., 2001, 2007; Stein et al., 2003). Results of several smaller trials suggest that there may be a clinically important effect for mirtazapine, amitriptyline and phenelzine (NCCMH, 2005).

Duration of the treatment

Positive effects are usually present within a few weeks but often increase up to 8-12 weeks of treatment. A further decrease in symptoms has been reported up to 6 months commencement of treatment (Marshall et al., 2007) with improvements maintained at 52 weeks (Kim et al 2008; Davidson et al., 2001). It is recommended that pharmacological treatment is continued for at least 6 months, and more usually at least 12 months, if a positive response has been achieved. For hypnotic medication (benzodiazepines and non-benzodiazepines) short-term use only is recommended.

Sessions

It is recommended (NCCMH, 2005) that:

- PTSD clients with increased suicide risk should be seen more frequently than PTSD clients not at increased risk.
- PTSD clients should be informed of potential side-effects and of the risk of discontinuation and withdrawal symptoms.
- Tolerability of antidepressants should be checked regularly (e.g., signs of akathisia, suicidal ideation).
- Discontinuation should be done by gradually reducing the dose over a four week period.
Interventions among traumatized children and adolescents

Special support and attention should be focused on children and adolescents exposed to traumatic events and disasters. Information, help and treatment must be based on knowledge about age-salient vulnerabilities and resources. In the aftermath of trauma or disaster parents or guardians should be informed of the possibility that their children may develop PTSD. They should be encouraged to contact their general practitioner if symptoms persist beyond 1 month (NCCMH, 2005).

Recommended treatment for chronic PTSD symptoms among children

- Trauma focused CBT should be offered to children with severe PTSD suited to circumstances and development.
- Trauma focused CBT should be offered to older children with severe post-traumatic symptoms or with severe PTSD in the first month after traumatic event (NCCMH, 2005).
- EMDR should generally be offered to older (> 7-years) children.

Effectiveness

Structured therapy is more effective in decreasing PTSD in children than general support. Evidence is available on the effectiveness of Trauma Focused Cognitive Behavioural Therapy (TF-CBT) and EMDR (in the EMDR protocol for children a greater emphasis is put on establishing a safe place that evokes positive emotions prior to the procedure).

Duration of treatment

- 8-12 meetings of 90 minutes regular treatment by same therapist.
- Information about the course of treatment should be provided to both parents and children.

Sessions of (trauma focused) psychological treatments for children

- Psycho-education to children and parents.
- Symptom monitoring (e.g. diaries of flashbacks, nightmares, distress).
- Re-establish routines.
- Coping skills training.
- Graded exposure – until habituation.
- Safety creation and self-regulation training.

Typical course, recovery and nature of trauma-related symptoms in children

- Almost all children show extensive fear, clinging to parents and intrusive symptoms immediately after trauma exposure.
- The majority (~75%) show a gradual decrease in symptoms during the first months.
- About 13-25% develop PTSD after major disaster in 3-6 months if not helped.
- Depressive symptoms may occur later, e.g., 6-9 months afterwards.
- Trauma affects comprehensive psychosocial development, e.g. pathological grief, excessive fears, fantasy, play and dreaming.
Risk factors for predicting PTSD or other psychopathology
- Pre-trauma factors: family mental health problems and relational problems.
- Previous exposure to severe trauma.
- During the trauma: severe appraisal, helplessness, excessive fear of family safety.
- Post-trauma factors: disturbed parental relations, relocation, denial and avoiding coping strategies.

Developmental aspects
- Children can be vulnerable to PTSD and psychosocial disturbance at all ages.
- The meaning of trauma, ways to process it and symptom expression varies according to age:
  - Infancy: high arousal and difficulty to attenuate.
  - Toddlers: difficulties in emotion regulation and excessive fears, disturbed sleep.
  - Preschoolers: repetitive play, difficult in controlling aggression, night terrors.
  - Middle childhood: concentration problems, somatic symptoms, various fears.
  - Adolescence: shortened sense of future, seeking of dangers, depressive symptoms.
- Attachment and safety seeking behavior is activated in all ages.
- Severely traumatized children can lose their developmental achievements, e.g. stuttering in preschool age and independency in adolescence.
References


