BRITISH COLUMBIA FAMILY PHYSICIAN GUIDE

ASSESSMENT OF PATIENTS AFTER A MASS CASUALTY EVENT

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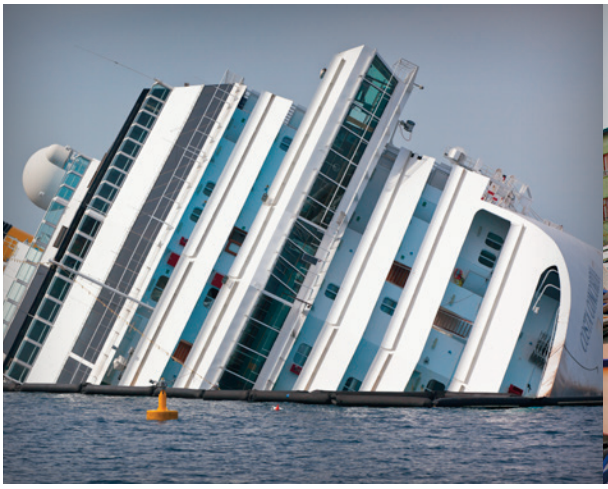


1. WHAT IS A MASS CASUALTY EVENT (MCI)?

A disaster is considered a "disruptive event whose destructive impact overwhelms a community's ability to meet healthcare demands."[1] When disasters involve significant human casualties, they are termed mass casualty incidents (MCIs), events which generate more strain on locally available resources than they are able to manage.[2]

> For the family physician, patients may display traumatic symptoms due to witnessing a threat, even if no one was actually injured or killed.

Those that experience such events will present to their family physician with signs and symptoms reflective of such events. This may be immediately following an MCI or many months after. While some of the presenting complaints may be physical, more often they will be psychosocial in nature, such as anxiety and depression. Research has increasingly shown that not only is post-event psychological trauma unique, but with early identification and treatment the long-term consequences can be mitigated.

The purpose of this guide is to serve as a reference for family physicians in the areas of MCI related stress, including post-event Acute Stress Disorder (ASD) and/or Posttraumatic Stress Disorder (PTSD).

a. Examples of an MCI

i. Characteristics

An MCI is not necessarily defined by the actual number of victims, but rather by the relative strain which is placed on the local health care system. A bus crash in a small town involving a few people is as relatively devastating as a larger incident in an urban area. The event may be an act of nature (e.g., earthquake), or be human-caused (e.g., bomb). In either case, family physicians are likely to receive visits from casualties and witnesses of such an event, and will likely include both adults and children. The timeframe of the initial visit could range from immediately after the incident, to months or considerable time afterwards.

Traumatic events may be either individually or collectively experienced, but MCIs are usually collectively experienced. Categories include Chronic Threats (e.g., Community Violence, Toxic Hazards), Escalating Threats (e.g., Terrorism, Public Health Epidemics), and Acute Threats (e.g., Natural Disasters, Technological Accidents).[3]

ii. Onset

Based on the categories above, an individual reaction to an MCI will vary considerably from person to person, depending on his or her physical and emotional proximity to both the event and other casualties, existing mental health challenges, and previous exposure to similar events. However, mass violence incidents are more likely to have serious mental health consequences than natural disasters.[3]

iii. Duration

The duration of a traumatic reaction also is likely to vary. While most mass casualty events are of short duration, the recovery from such events can be much longer. This is particularly the case when the event receives ongoing media attention or has potential legal implications, both of which can be triggering events and increase the perceived length of the event. Not all, but many who experience traumatic psychosocial reactions require several interactions with health professionals, including referrals and ongoing therapy with mental health specialists.

iv. Proximity to Danger

Based on the proximity to potential harm from an event, witnesses to an MCI can be categorized as either "directly exposed," "indirectly exposed," or "remotely affected."[4] Though the directly exposed individuals are most likely to be distressed, only some will display traumatic symptoms. Proximity to an event is a significant factor, but is not in and of itself the determining risk factor for experiencing traumatic stress.

b. Common Psychosocial Reactions to an MCI

The reactions to any MCI often vary with each individual. Psychological concerns such as depression, anxiety, irritability or stress are most frequent. Non-specific psychological distress and general health problems are also common, including sleep pattern changes, lowered energy levels, alcohol and food consumption changes and digestive concerns.[3] The majority of the general population (75%) will experience what is considered moderate-to-severe psychosocial impairment following an MCI, while only a relative few (10%) experience minimal or no impairment.[3]

Children and youth are more likely to exhibit presentations such as behavioral issues, hyperactivity, and/or delinquency, in addition to the aforementioned psychological concerns.

A challenge to physicians is how to identify patients who may be most susceptible to developing long-term psychological trauma after an MCI has occurred, and the "best practices" for treatment and management of the condition. The research results of post-disaster studies have not provided a clear explanation of how psychosocial factors affect the behavioural health of survivors.[5]

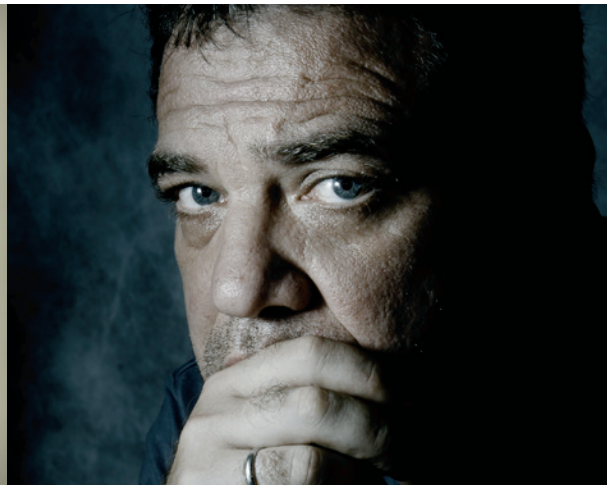
2. WHY IS UNDERSTANDING ABOUT MCIs IMPORTANT?

What's different?

An event is considered traumatic if the individual a) directly experiences the traumatic event; b) witnesses a traumatic event; c) learns about a traumatic event that happened to a close family member or close friend; or d) experiences first-hand repeated or extreme exposure to details of the traumatic event.

In addition, feelings of fear, helplessness, and/or horror were/have been experienced since the event.[6]

The combination of a growing population and increasingly wider range of incidents translates into an increased likelihood of any one individual experiencing an MCI. Therefore, even when the relative risk for a natural disaster appears small, healthcare infrastructures in any community need to be prepared for when acute and mental health care resources quickly become overwhelmed. Human-caused disasters account for 42% of all MCIs since the 1990s, compared to only 16.5% from 1900-1970.[7] Family physicians are often the initial contact of any individual in the healthcare system. They will become responsible for triaging and referring patients for proper secondary assessment and to treatment resources.



3. UNDERSTANDING ACUTE STRESS DISORDER AND POST TRAUMATIC STRESS DISORDER AND MCIs

It is important to note that patients may be quite traumatized by an event but may not meet the specific criteria for a diagnosis of Acute Stress Disorder (ASD) or Posttraumatic Stress Disorder (PTSD). A diagnosis of ASD or PTSD is not a prerequisite for receiving treatment.[8]

ASD is defined when specific symptoms occur within the first 30 days following an exposure to actual or threatened death, serious injury, or sexual violation by directly experiencing the traumatic event(s); witnessing the event(s) in person; learning that the event(s) occurred to a close family member or close friend; or experiencing repeated or extreme exposure to aversive details of the traumatic event(s).

The primary diagnostic criteria for ASD among adults includes the presence of nine or more of the following symptoms from any of the five categories of intrusion, negative mood, dissociation, avoidance, and arousal, beginning or worsening after the traumatic event(s) occurred: [9]

- Intrusive memories related to the event
- Recurrent distressing dreams related to the event
- Dissociative reactions in which the individual feels or acts as if the event were currently happening (i.e., flashbacks).
- Psychological distress caused by events, actions etc. that may resemble aspects of the traumatic event
- Negative mood
- An altered sense of the reality of one's surroundings or oneself (e.g., time slows, depersonalization)
- Inability to remember an important aspect of the traumatic event (not caused by physical symptoms)
- Attempts to avoid memories, thoughts, or feelings connected to the event
- Efforts to avoid people, places, conversations related to the event
- Sleep disturbance

- Irritable behavior or angry outbursts
- Hypervigilance
- Problems with concentration
- Exaggerated startle response[10,11]

There is an emphasis on dissociation in ASD, specifically symptoms of detachment or depersonalization.[12]

When symptoms persist for at least 30 days, the primary diagnostic criteria for PTSD are:[12]

- Exposure to actual or threatened death, serious injury, or violence
- Re-experiencing (recollections of the event, such as flashbacks or nightmares)
- Avoidance of stimuli associated with the event (i.e., intentionally avoiding activities, places, and events which remind patient of the event)
- Persistent negative thoughts and moods associated with the event (i.e., exaggerated negative beliefs and skepticism)
- Hyperarousal (i.e., difficulty sleeping, lack of concentration, irritability, angry outbursts)

Onset may range from days to months depending on the individual, his or her previous exposure to traumatic events, psychological profile/personality, etc.[12] Diagnosis of PTSD can be challenging because of the heterogeneity of the presentation, and possible resistance on the part of the patient to discuss past trauma.[11]

4. ASSESSMENT TOOLS (ADULTS)

There are several assessment tools that have been developed to help practitioners identify ASD in the office or clinical setting. None are specific for PTSD. The more common of these have been included below (as well as hyperlinks where available):

a. Stanford Acute Stress Reaction Questionnaire

The Stanford Acute Stress Reaction Questionnaire (SASRQ) features 30 items, including:

- 10 questions: dissociation (numbing, detachment, emotional unresponsiveness)
- 6 questions: re-experiencing of trauma
- 6 questions: avoidance
- 6 questions: anxiety and hyper arousal
- 2 questions: impairment in functioning

The scoring may be based on a Likert scale (0-5), Yes/No (1/0) to document whether a symptom is presented.[13] The SASRQ is considered a reliable tool to identify patients at greatest risk for long-term mental impairment, when administered within the first month of the event.[14]

Link to SASRQ: http://stresshealthcenter.stanford.edu/research/documents/StanfordAcuteStressReactionQuestionnaire-Flood.pdf

b. Impact of Event Scale

The Impact of Event Scale (IES) is one of the most widely used self-report instruments for the assessment of PTSD, although some have expressed limitations regarding both reliability and validity.[A,15]

The original IES was a 15-item, self-report questionnaire that provided a cross-sectional picture of subjective responses to stressful life events. It is not specifically designed to test for PTSD.[16] The primary strength of the IES is to measure intrusion and avoidance stress responses. A revised version (IES-R) of the test contains 22 items, but does not directly correspond with DSM-V PTSD criteria.[17]

Link to IES: http://getcbt.org/the-impact-of-events-scale-revised/

c. Acute Stress Disorder Interview

The Acute Stress Disorder Interview (ASDI), a 19-item structured clinical interview, is specifically designed to evaluate ASD.[18] Based on DSM criteria, the ASDI displays good internal consistency, concurrent validity, and test-retest reliability. A large limitation is the dichotomous scoring method.[13]

Link to ASDI: http://www.istss.org/AcuteStressDisorderStructuredInterviewASDI.htm

A *IES is not considered a clear measure of distress by some authors, due to possibility of patients feigning psychopathology*

d. Acute Stress Disorder Scale

The Acute Stress Disorder Scale (ASDS) is essentially a self-report version of the ASDI,[18] which both indexes ASD and predictors of PTSD. The test is considered to exhibit very good sensitivity, and good specificity in identifying ASD.[18] There is some debate over which symptoms of ASD are specific predictors of PTSD, as some studies have shown that re-experiencing, avoidance, and arousal symptoms have greater predictive power than dissociative symptoms for PTSD.[19]

Therefore, the ASDS is optimally used as a tool to measure the severity of acute stress, rather than an actual ASD diagnosis. A score of 50 or more is considered within the range of severe acute stress.[18]

Link to ASDS: http://www.istss.org/AssessmentResources/4435.htm

5. TREATMENT OPTIONS

a. Supportive Treatment

Treatment of a patient may be in the form of supportive counseling, which focuses on his or her current life situation and addresses current behavioural health concerns. The goal is to help the individuals better understand and help themselves through relatively non-intrusive problem-solving and coping strategies.[17]

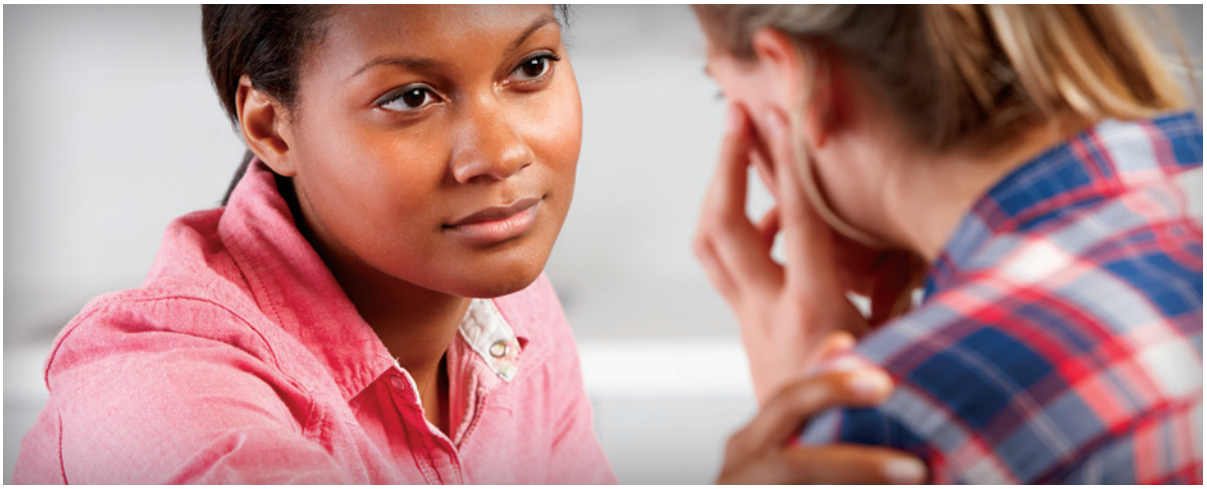
In general, psychotherapy is preferable to medication as the first stage of treatment. If the patient presents with extreme fear and avoidance, an exposure technique will likely be recommended.[B] If the patient presents with extreme guilt and trust issues, cognitive therapy would be recommended.[20]

> A combination of psychotherapies is preferable to medication as the first stage of treatment

Cognitive and behavioral therapies require specific training to be applied to individuals diagnosed with PTSD. Cognitive behavioural therapy and prolonged exposure have detailed therapist and patient manuals to guide treatment.

For a family physician, this will likely entail referral of the patient to a mental health specialist after the initial visit by the patient, upon completion of an ASD or PTSD assessment tool *(Section 4, 6)*.

B *In rural and remote areas access to specialized psychotherapy may be limited and, therefore, treatment may initially be more dependent on medications.*



CHILDREN: Children and adults may share some of the same symptoms, such as self-blame, survivor's guilt, dependency, and emotional numbing. However, young children's re-experiences of the trauma are more likely to be manifested as repetitive play than adult symptoms such as recurring images, thoughts, or perceptions.[21]

b. Pharmacotherapy

i. Definition and Discussion

Pharmacotherapy is the combination of medication and psychological therapy by a mental health professional, where the medication serves as a complement, not as the primary method of treatment. The therapeutic goals of pharmacotherapy are to decrease intrusive thoughts and images, and other symptoms such as avoidance, hyperarousal, and depression.[22]

Despite the regular use of a variety of medications (see below, *Pharmacology*), relying exclusively on medications for treatment should be avoided.[17,19,23] Although medications may treat some of the symptoms, they do not help relieve the residual feelings associated with the traumatic event.

ii. When to Use

An appropriate combination of medication and psychological therapy should be used when:[23]

- The patient is unable to access psychological services in a timely fashion
- The patient has not significantly benefited from psychological therapy
- Especially high levels of dissociative symptoms are present, and likely to be exacerbated by psychological therapy
- Medication assists the patient in achieving the stability necessary for psychological therapy

iii. Providers

- Canadian Mental Health Association, BC Division: http://www.cmha.bc.ca/
- HealthLink BC: http://www.healthlinkbc.ca/
- College of Physicians and Surgeons of BC, Physician search: https://www.cpsbc.ca/physician_search

The therapeutic goals of pharmacotherapy are to decrease intrusive thoughts and images, and other symptoms such as avoidance, hyperarousal, and depression.

iv. Costs

Psychiatric consultations are covered by the BC Medical Services Plan. For individual therapy with a psychologist, the rate is approximately $110 per 50-minute session.[24]

c. Pharmacology

i. Definition and Discussion

For mental health treatment, pharmacology refers to the use of prescribed medications in order to reduce symptoms related to severe trauma, ASD or PTSD. Medications usually fall within one of the two following categories:[25]

- *Serotonin-Specific Reuptake Inhibitors (SSRI)* – "First line" medications for the treatment of PTSD, including, fluoxetine (Prozac), fluvoxamine (Luvox), sertraline (Zoloft), and paroxetine (Paxil).[25] Their unique strength, compared to other categories of medications, is the ability to reduce numbing symptoms of PTSD, although prescription within four weeks of symptom onset is not recommended.[17,25] Dosage usually begins at low levels, and may evolve into high dosage levels if symptoms do not improve over the course of several weeks.[18]
- *Monamin Oxidase Inhibitors (MAOI) and Tricyclic Antidepressants (TCA)* – Prescribed for patients displaying symptoms of depression. Patients who are prescribed any of these medications will likely be subject to specific dietary restrictions, due to possibly dangerous interactions with ingredients in some foods and beverages.[18]

CHILDREN: Based on the limited number of research studies involving children and adolescents, the following list is a brief summary of psychopharmacological intervention studies.[21]

- Carbamzepine: asymptomatic
- Citalopram: 38-54% reduction in PTSD symptoms
- Clonidine: decreased aggression, hyperarousal, and sleep problems
- Guanfacine: eliminated nightmares
- Propanolol: decreased pre and post-PTSD severity

ii. When to Use

Referral to a mental health specialist is considered the "best practice" for acute cases, who may be prescribed MAOI or SSRI medications after multiple therapy sessions.[17] However, in communities where access to mental health specialists is limited, the prescription of medications may be considered earlier in the treatment regimen.

> Serotonin-Specific Reuptake Inhibitors (SSRI) – "first line" medications for the treatment of PTSD, including venlafaxine, fluoxetine, sertraline, and paroxetine.

iii. Providers

The majority of medications are available at any community pharmacy.

iv. Costs

Most medications are included in the *BC PharmaCare No-Charge Psychiatric Medication Plan* (Plan G), subject to qualification criteria on a patient-by-patient basis: http://www.health.gov.bc.ca/pharmacare/outgoing/plangtable.html

If a patient does not have current BC Pharmacare prescription drug coverage, then the approximate price range for the majority of the aforementioned medications is $.35-$.65 cents per pill, plus a dispensing fee of $10-11 dollars per prescription.[26]

d. Psychosocial Treatments

i. Psychological First Aid

[1] Definition and Discussion

Psychological First Aid (PFA) involves simple interventions such as comfort, information, support, and practical assistance. This method is usually the first step of treatment, and involves the following steps.[23]

- Initiate contact and engage with patient in a non-intrusive, compassionate manner
- Ensure immediate and ongoing safety of patient (physical and emotional)
- Stabilize patients who are overwhelmed and distraught by providing reassurance and containment
- Gather information to determine immediate needs and concerns
- Provide practical assistance in helping patient address immediate needs and concerns
- Connect the patient with social supports by helping to structure opportunities for brief or ongoing contacts with individual and community support services

- Provide information to help with coping, including education about coping with stress
- Link the patient with appropriate services, both for present and future use

This method establishes a general experience of safety and containment, orientation to the event, and opportunity for emotional release.[27]

[2] When to Use

This method of treatment should be delivered immediately and up to four weeks after the event ("immediate impact phase"), to patients experiencing acute reactions and who are potentially unable to regain psychological equilibrium on their own.[28] The goals are to mitigate the impact of the event and accelerate the normal recovery of persons having normal reactions to an abnormal event.

One of the hallmarks of good crisis intervention is follow-up to assess progress and return to homeostasis. Follow-up should occur within one week of the initial intervention. It is essential to monitor progress. Should the patient have little or no progress, referral to a higher level of care is indicated. A follow-up appointment to the initial assessment should be scheduled within 1-2 weeks.[23]

CHILDREN: The aforementioned *Psychological First Aid* guidelines provide instructions for administration to youths of all ages, from toddlers to adolescents. Reunion and engagement with significant others (family and peers) is an important part of the treatment, with parent or guardian participation an "essential" component.[27]

Self-administration by adults/parents is also possible, after initial consultation and treatment by a medical professional. Guidelines are available at: http://www.nctsn.org/content/psychological-first-aid

> Psychological First Aid establishes a general experience of safety and containment, orientation to the event, and opportunity for emotional release.

[3] Providers

Psychological First Aid may be administered by family/general physicians, as it is considered to be relatively safe since it does not involve in-depth emotional processing or detailed narratives of the event. An emergency responder, Certified Trauma Responder, Certified Traumatologist or trauma-trained counselor may also provide PFA.

[4] Costs

Subsequent *Psychological First Aid* may be administered by a family physician and may be self-administered.

ii. Cognitive Behaviour Therapy

[1] Definition and Discussion

Trauma-focused Cognitive Behavioural Therapy (CBT) has the strongest empirical evidence among psychotherapy treatments of ASD and PTSD.[19] Cognitive behavior therapy (CBT) is a technique that can be used to help people better

understand the thoughts and feelings that lead to potentially problematic behaviors. CBT has a range of uses, but it can be particularly effective when treating phobias, anxiety, trauma, and depression. One of the most appealing aspects of cognitive behavior therapy is that it is usually considered a short-term option that focuses on a very specific set of behaviors.

The two primary interventions during CBT treatment are exposure and cognitive restructuring, derived from behavioural and cognitive theories.[17] Exposure therapy involves the patient's recall of the traumatic event, and confrontation with everyday life situations which may remind the patient of the event ("in vivo exposure").[22]

CBT exposure component may be contraindicated with the following crises or disaster related conditions thus underscoring the importance of crisis intervention as a component to the overall continuum of care:[29]

- Acute bereavement
- Anger
- Extreme anxiety and panic
- Marked dissociation
- Ongoing stressors
- Psychosis
- Severe depression
- Suicidal risk, homicidal risk
- Unresolved prior trauma

[2] When to Use

CBT is usually introduced within the first month after the traumatic event, as initial treatment for ASD while reducing the likelihood of developing PTSD.[30]

CHILDREN: There are numerous PTSD assessment tests designed specifically for children (summarized in *section 6, Children*). Children who experience pronounced symptoms of depression are more likely to benefit from the structure of CBT, especially when nondirective treatment approaches are not successful.[31]

> Trauma-focused Cognitive Behavioural Therapy (CBT) has the strongest empirical evidence among psychotherapy treatments of ASD and PTSD.

[3] Providers

Unless the family physician has received training in CBT, referral to a mental health professional is recommended.[23]

Academy of Cognitive Therapy:
Cognitive Therapist Search

Anxiety BC, CBT:
http://www.anxietybc.com/cbt-home

CBT Therapists in BC:
http://therapists.psychologytoday.com/rms/prof_results.php?state=BC&spec=293

[4] Costs

Psychiatric consultations are covered by the BC Medical Services Plan. For individual therapy with a psychologist, approximately $110 per 50-minute session.[24]

iii. Play Therapy (Children)

[1] Definition and Discussion

For children, the re-experiencing of traumatic episodes is often revealed through play therapy, where a therapist utilizes games, drawings, or non-structured ("nondirective") amounts of time for the child to act out possible traumatic feelings or memories.[32] Reenactment of the traumatic events is another method of play therapy, but should only be conducted by a competent mental health professional trained specifically in art and play therapy.

[2] When to Use

It is very important to not push the child into painful memories or feelings too quickly. Therefore, *nondirective play therapy* is the recommended first step in treatment for children who are displaying avoidance and/or social withdrawal symptoms, as long as the clinician does not allow aggressive behaviour to get out of control.[33]

Play therapy usually requires multiple sessions, and is another reason why patients should be referred to a professionally trained mental health therapist.

> Nondirective play therapy is the recommended first step in treatment for children who are displaying avoidance and/or social withdrawal symptoms.

[3] Providers

- BC Play Therapy Association: http://bcplaytherapy.ca/
- BC Psychological Association (search by "Therapy Method"): http://www.psychologists.bc.ca/find_psychologist_full

[4] Costs

For individual therapy with a psychologist, approximately $110 per 50-minute session.[24]

e. Alternative Treatments

i. Critical Incident Stress Management CISM: Defusings, Debriefings, etc.

[1] Definition and Discussion

CISM is an integrated multi-component strategic plan for dealing with traumatic event exposure to secondary patients, such as emergency personnel,[34] and encompasses support services both before and after an event.[35] CISM has grown exponentially to be accepted as a key intervention management plan for trauma, however, not all practitioners believe that it is an appropriate measure. Recent randomized controlled studies have demonstrated demonstrable benefits.[36] Prior to participating in an in-depth facilitated group discussion (i.e., a Critical Incident Stress Debriefing [CISD]), those affected by an MCI may benefit from an individual consultation.[34,35]

Well trained CISM interveners may provide any of the following for individuals or groups exposed to a traumatic event. Please note that training in the CISM model is essential. CISM should not be initiated except by such personnel. The components are in sequential order, as follows:[36]

1. Pre-crisis preparation.
2. Demobilizations for responders in a disaster or large-scale incident.
3. Community briefings or support programs in a disaster or large-scale incident.
4. Defusing: Structured small group discussion provided within hours of a crisis for purposes of assessment, triaging, and acute symptom mitigation.
5. Critical Incident Stress Debriefing (CISD) refers to the "Mitchell model" – a 7-phase, structured group discussion for responders and workplace setting
6. One-on-one crisis intervention/counseling or psychological support
7. Family CISM
8. Organizational/Community intervention, consultation
9. Pastoral Crisis Intervention
10. Follow-Up/Referral for continued care[37]

[2] When to Use

The application of the above strategies have various time considerations but are based on the principle of immediacy, proximity and positive expectancy. The selection of the intervention is based on level of exposure, group or individual reactions to the event and psychological readiness of the client to receive services.

NOTE: CISD is only one component of a comprehensive CISM program, and is a group intervention only for first responders or those involved in a workplace incident. *Psychological First Aid* and one-to-one interventions are the correct tools for single individuals exposed to a traumatic event.

CHILDREN: CISM programs are specifically geared towards emergency response personnel, though some of the concepts may be applied to both parents and their children who are victims/witnesses of a traumatic event.

[3] Providers

Critical Incident Stress Management Services:

- Employee and Family Assistance Program (EFAP): http://www.efap.ca/services/critical-incident.htm
- International Critical Incident Stress Foundation (ICISF): http://www.icisf.org
- Occupational First Aid Attendants Association of BC, CISM: http://www.ofaaa.bc.ca/cism_overview.html

[4] Costs

In many instances, cost for participation in a CISM program may be covered by the employer. Cost is relatively inexpensive, since CISM is a comprehensive group-participation program often provided by volunteer teams within the workplace. If the employer does not cover the cost, Worksafe BC programs may cover the cost.[38]

ii. EMDR

[1] Definition and Discussion

Eye Movement Desensitization and Reprocessing (EMDR) incorporates bilateral eye movements or other left-right stimulation such as bilateral tactile sensations or alternating bilateral sound input with more standard counseling/therapy such as CBT.

EMDR[C] is an 8-phase therapy which involves retrieval of a patient's traumatic images and memories, evaluating aversive qualities, and focusing on alternative cognitive appraisals of the images while performing sporadic eye movements.[39]

The eight phases are:[40]

1. Client History and Treatment Planning: review medical history
2. Preparation: EMDR theory is explained
3. Assessment: identify aspects of target which best represent the traumatic event
4. Desensitization: patient thinks of the targeted material, then perform eye movements
5. Instilling/Strengthening Positive Cognition: preferred cognition repeated, after distressful memories/thoughts are reduced
6. Body Scan: patient asked if they feel any disturbing sensations as targeted material is mentioned
7. Closure: ensure the patient feels safe and comforted, before leaving the session
8. Re-evaluation: at beginning of following session, clinician confirms positive results of previous session

C *Although there is substantial empirical evidence in support of EMDR, the treatment is somewhat controversial because the research studies are not considered as rigorous as those which have evaluated CBT*

EMDR may be contraindicated for clients that are especially labile or fragile. Also contraindicated for destabilized clients with issues of suicidality, those who are actively abusing drugs or are addicted to alcohol and those with Dissociative Identity Disorder (DID) or with strong dissociative behavior.

[2] When to Use

While EMDR is superior to no treatment and non-exposure therapies, it has not proven to be more effective than other exposure therapies such as systematic desensitization (gradual exposure to stressors) or flooding (confronting traumatic memories all at once).[39]

CHILDREN: EMDR is also sometimes used for children, particularly adolescents suffering from acute anxiety or depression.

[3] Providers

EMDR is highly specialized, and therefore should only be conducted by a licensed mental health professional.[41]

EMDR Canada (Therapist Search):
http://emdrcanada.org/find-a-therapist

[4] Costs

Psychiatric consultations are covered by the BC Medical Services Plan. For individual therapy with a psychologist, the rate is approximately $110 per 50-minute session.[24]

iii. Thought Field Therapy (TFT)

[1] Definition and Discussion

TFT is one of a number of therapies collectively known as Energy Psychology. It uses a combination of acupuncture theory of energy movement, coupled with kinesiology and psychology to relieve or eliminate most negative emotions by balancing the body's energy system. Based on the principles of Chinese acupressure, TFT is a 12-step process which involves physically tapping the patient at specific "treatment points" in a specific sequence, while the patient is tuned in to the upsetting emotions.[42]

The term "thought field" is defined as a "delimited domain of consideration and focus," where a change of thought results in a change in the patient's overall mood and demeanor.[43]

It is therapeutic in efficacy but is also a self-help tool that is easy for any client to learn and apply. No contraindications as a result of TFT therapy have been reported to date, however more research may be necessary in this area.[D]

[2] When to Use

TFT is relatively non-intrusive, and therefore may be administered at any time during the patient's course of treatment. The procedure will not interfere with the goals of any other therapies, which may be administered simultaneously.[43] Patients may even administer TFT to themselves, as it does not require discussion or revisiting of the traumatic event.[40]

CHILDREN: Parents may administer TFT to their children, once they have properly learned the technique from an accredited TFT therapist.[43]

[3] Providers

Preferably administered by a TFT therapist for the initial treatment, but may be self-administered by patient thereafter.

Thought Field Therapy Practitioner Guide:
http://www.tftpractitioners.net/

[4] Costs

Depending on the type of medical professional (certified in TFT, ranging from naturopathic practitioners to licensed therapists), the hourly rate ranges from $65-200 per hour, with most sessions lasting 30-60 minutes. Patients may administer the TFT themselves, after the initial treatment session.[42]

D *The primary criticism of TFT is a lack of empirical evidence, over-reliance on anecdotes, and lack of peer-reviewed publications to substantiate the claimed healing capabilities of TFT*

6. CHILDREN AND TRAUMA

Although the parent/guardian and child will visit the office together, if possible it is recommended to interview each separately, to minimize influence and interruptions from both.[44] Generally, children tend to mirror the stress reactions of their parents.[45] This is why it is paramount to interview the parent/guardian prior to assessing the child.

Summary of general cognitive ability (by age group):[44]

- Under 4 years old: rarely reliable as witnesses
- 4-7: reasonably consistent, can answer concrete questions, but unable to draw inferences
- 8-12: can answer questions that require inferences and multiple parts, and express more abstract concepts
- Over 12: capable of most cognitive tasks

There are many cognitive tests which measure the impact of trauma in children.[E] The following specifically measure PTSD and Dissociative Measures.[44,46]

- Adolescent Dissociative Experience Scale (A-DES): Age Group=12-18 years old
- Child and Adolescent Psychiatric Assessment (CAPA-C, CAPA-P): Age Group=9-17
- Child Dissociative Checklist (CDC): Age Group=5-12 (administered to parent/guardian)
- Child PTSD Symptom Scale (CPSS): Age Group=8-18
- Child Report of Post-traumatic Symptoms/Parent Report of Post-traumatic Symptoms (CROPS/PROPS): Age Group=6-18 (PROPS administered to parent/guardian)
- Child Reaction to Traumatic Events Scale (CRTES): Age Group=8-12
- Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA): Age Group=8-18
- Los Angeles Symptom Checklist (LASC): Age Group=(Adolescents, mean age=16)
- Pediatric Symptom Checklist(PSC-17):[47] Age Group=4-15

> Primary risk factors for PTSD in Children are: Age, Maternal Psychopathology, and Inadequate Family Social Support.

Primary considerations during the assessment and treatment of children and adolescents (compared to adults):

- Both traumatic reactions and styles of reporting reactions among youth differs from adults[44]
- No single test or method of assessment provides a complete picture of youths[44]

E *More than one test is necessary to reasonably assess whether referral to a mental health professional is necessary.*

- Boys are more prone to outward hostility, while girls are more likely to become withdrawn[45]
- The child's dependency on adults to present them for treatment, both initially and subsequent treatments[34]
- Awareness of the child's emotional wellbeing in relation to other family members, and the overall psychological dynamics of family interrelationships (not just parent/child)[34,44]
- Children and adolescents are more likely to be developmentally regressed by trauma[34]
- Primary risk factors for PTSD in Children:[34]
    - Age
    - Maternal Psychopathology
    - Inadequate Family Social Support
- Predominant PTSD symptoms in children:[31,32]
    - Regression
    - Posttraumatic Play
    - Fear of the Dark
    - Less likely to display avoidance[F] symptoms
- Parent or guardian should be interviewed before child/adolescent, to determine whether symptoms of child meet the diagnostic criteria for PTSD[32]
- Adolescents may experience flashbacks (similar to adults), but children typically do not[32]
- Adolescents are also more likely than children to experience sleeplessness and irritability[32]
- Children (older than 6 years old) may display disorganized or agitated behaviour, rather than fear[G] or helplessness often exhibited by adults[32]
- Children (older than 6 years old) may exhibit repetitive play which reenacts specific traumatic themes, rather than intrusive recollections displayed by adults[32,48]
- Not all children exposed to trauma will exhibit symptoms[33]
- Symptoms may not display in children until months or years after the event[H,49]

Preschool children are more susceptible to acute separation anxiety, displaying states of arousal, sleep disturbances, clinging, and fear of being alone. School-aged children are more likely to express psychosomatic complaints, and display inconsistent or reckless behaviour. Adolescents may either gravitate towards independent behaviour, or become more withdrawn (including denial).[49]

NOTE: Proper psychological assessment of a child usually requires 3-5 sessions with a mental health professional.[33]

7. AT-RISK POPULATIONS

a. Elderly Patients

The elderly may also present to the family physician with post-event psychological trauma, with similar treatment options as young and middle-aged adults. Increasing age is considered to be a mental health risk factor for trauma.[49] As mentioned previously, the presentation of PTSD can occur sometime after an event. Among this population, that delay could be years, or even decades.

It is important to be especially sensitive to the needs and feedback of this demographic during assessment.[49] Often there is less social support available to the elderly, compared to other age groups.[50] Although the aforementioned adult assessment and treatment tools may be used for the elderly, the following guidelines should be considered:[34]

i. Assessment

Assessment includes a comprehensive history (developmental, medical, psychiatric, substance abuse, etc.), and may include a general cognitive screening tool such as the Mini Mental State Examination (MMSE) to determine overall functionality, prior to specific PTSD assessment.

F *Some authors state avoidance as a potential symptom in children.*
G *Some authors state fear as a potential symptom in children.*
H *Some authors question whether there are long-term residual psychological effects on children.*

ii. Treatment

Behavioural interventions such as relaxation and arousal reduction techniques are more likely to be understood than some elements of CBT.[J] Generally their focus is only on a couple of concepts during the session.

b. Aboriginal Patients

The incidence rate of PTSD among the Aboriginal population is significantly higher than the overall population average.[48] The problem of "historical trauma" among this group, in addition to major cultural differences and the importance of kinship among the community, results in an added layer of complexity when differentiating PTSD due to a particular event from chronic PTSD.[34]

i. Assessment

There is much greater likelihood that an aboriginal patient may be concerned about the stigma associated with mental health treatment. This may present as a barrier to engagement. Some cultural guidelines to consider, when working with any population:[34]

- Explain the purpose of the questions, timeframe, and potential outcomes
- Verify with the patient whether they prefer to be interviewed individually, or with significant others present
- For some cultures, it is best not to refer to a dead person by name
- For some cultures, refrain from referring to close relatives of the patient by name (only by relationship)
- Be cautious of revealing personal information to a patient of the opposite sex
- Description of spiritual experiences are not necessarily delusions or hallucinations
- In all cases, ask the patient about their relationship with their culture and be curious about how you can best support them

> The incidence rate of PTSD among the First Nations/ Aboriginal population is significantly higher than the overall population average.

ii. Treatment

Collaboration with, or referral to, a First Nations mental health professional is recommended, if possible. For the initial patient visit, it is important for physicians to educate themselves regarding the patient's cultural norms as it relates to mental health, as culturally insensitive questions or treatment suggestions could alienate the patient and discourage them from seeking further treatment.[34]

J The existing research regarding the elderly and PTSD treatment is also relatively limited.

c. Emergency/Rescue Workers

Approximately 10% of first responders are estimated to have PTSD, with ambulance personnel displaying the highest rates (in comparison to police, fire, and other rescue workers).[34]

i. Assessment

Post-exposure screening of emergency personnel should focus on both the frequency and severity of the trauma exposure, as the repeated exposure often leads to an increased risk of PTSD.[34,39] Therefore, a comprehensive assessment of trauma history is recommended, which most likely will require access to personnel records and multiple visits by the patient to a mental health professional.

ii. Treatment

For first-responders, *Psychological First Aid* and CISM conducted by their peers are the recommended starting points of treatment. Initial treatment outcomes are more likely to be positive when there is peer-involvement, due to the high level of trust and camaraderie within this profession. Establishing a safe environment for patients is an important component of trauma therapy for emergency personnel, but avoid removing them from their work situation entirely. Continuing in a non-front-line role at work will allow them to access support through their peers and organization, while providing daily structure and self-esteem. Those who return to work are more likely to recover from PTSD, than those who do not.[34]

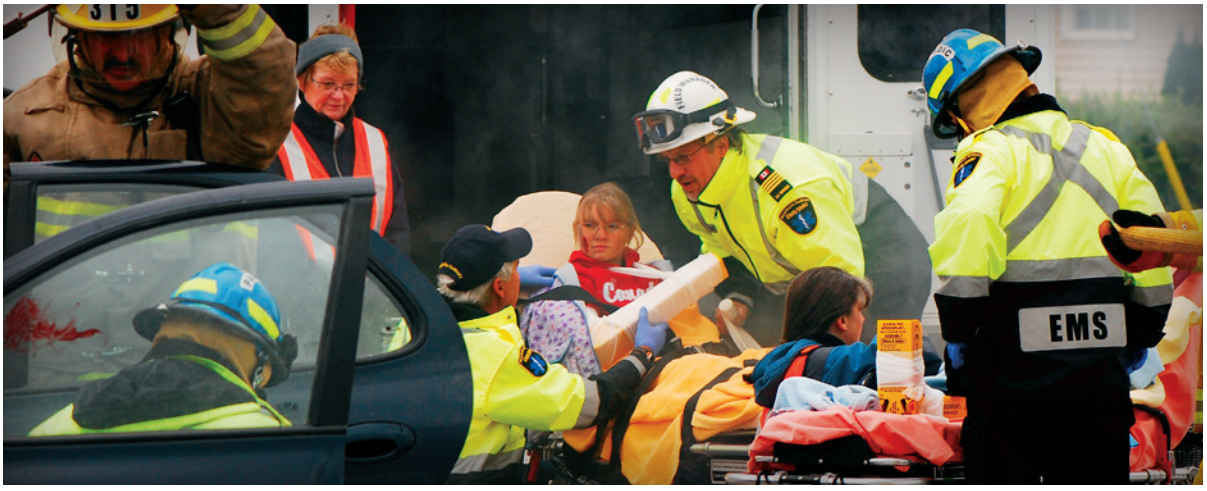
Approximately 10% of first responders are estimated to have PTSD, with ambulance personnel displaying the highest rates.

Disasters caused by humans tend to yield higher PTSD incidence rates among emergency workers, compared to natural disasters.[51] Therefore, exposure to such events (both recent and from the distant past) provides additional justification to refer an emergency worker to a mental health professional for extended therapy.

The initial meeting with the emergency/rescue worker (prior to referral) should include acknowledgment of the difficulty of their work, and discussion of normal psychological reactions after extreme stress within their occupation.[27]

d. Individuals with Cognitive or Physical Impairments

It is important to remember to tailor health and behavioural responses to the particular needs of the individuals. If possible, check in with the individual to ensure that you are providing support that is accessible and appropriate.



8. SPECIAL ISSUES

- Alternate symptoms: The expression of distress may manifest itself in the form of substance abuse, family dysfunction, adjustment disorders, and non-specific somatic symptoms[34]
- Confidentiality – Neighbouring communities: For MCIs which occur in small or remote communities, there is an increased likelihood of patients seeking assistance in neighbouring communities to minimize the potential of their confidentiality being compromised in their hometown[34]
- Confidentiality – Use of Interpreter: If the patient requires an interpreter they should not be familiar with the patient, to help preserve confidentiality[34]
- Delayed Onset: Although most individuals develop PTSD within a few months of the event, approximately 25% experience a delayed onset after 6 months or more[48]
- Physical Ramifications of PTSD: Trauma exposure and PTSD are often associated with physical illness (e.g., increased risk of angina, heart failure, bronchitis, asthma, peripheral artery disease)[48]

9. RESOURCES

a. Tests and Scales

- Acute Stress Disorder Interview (ASDI): http://www.istss.org/AcuteStressDisorderStructuredInterviewASDI.htm
- Acute Stress Disorder Scale (ASDS): http://www.istss.org/AssessmentResources/4435.htm
- Impact of Event Scale (IES): http://getcbt.org/the-impact-of-events-scale-revised/
- PTSD Checklist for DSM-5 (PCL-5): http://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp
- Stanford Acute Stress Reaction Questionnaire (SASRQ): http://stresshealthcenter.stanford.edu/research/documents/StanfordAcuteStressReactionQuestionnaire-Flood.pdf

b. Mental Health Resources

- Academy of Cognitive Therapy: http://www.academyofct.org/
- Anxiety and Depression Association of America – Screening Tools: http://www.adaa.org/living-with-anxiety/ask-and-learn/screenings
- BC Association of Clinical Counsellors: http://bc-counsellors.org/
- BC Psychological Association: http://www.psychologists.bc.ca/
- Canadian Mental Health Association – BC Division: http://www.cmha.bc.ca/

- Child and Adolescent Trauma Measures (see *Section 6, Children*): http://www.ncswtraumaed.org/wp-content/uploads/2011/07/Child-and-Adolescent-Trauma-Measures_A-Review-with-Measures.pdf
- Child PTSD Symptom Scale: http://www.istss.org/ChildPTSDSymptomScale.htm
- CISM – Canadian Critical Incident Stress Foundation (Education and Training): http://www.ccisf.info/Education-and-Training.html
- College of Physicians and Surgeons of BC – Physician search: https://www.cpsbc.ca/physician_search
- Counselling BC: http://www.counsellingbc.com
- Critical Incident Stress Management Services (CISM): http://www.efap.ca/services/critical-incident.htm
- EMDR Canada: http://emdrcanada.org/
- Pharmacology – Clinician's Guide to Medications for PTSD: http://www.ptsd.va.gov/professional/treatment/overview/clinicians-guide-to-medications-for-ptsd.asp
- Play Therapy – BCPTA: http://bcplaytherapy.ca/
- Psychological First Aid Field Guidelines (for adults/parents): http://www.nctsn.org/content/psychological-first-aid
- Psychological First Aid Online (training): http://learn.nctsn.org/course/category.php?id=11
- PTSD: Management of PTSD in Adults and Children in Primary and Secondary Care: https://www.ncbi.nlm.nih.gov/books/NBK56490/
- Thought Field Therapy Practitioner Guide: http://www.tftpractitioners.net/

c. Social Networks

- #PTSD: http://www.symplur.com/healthcare-hashtags/ptsd/
- PsychCentral Forums: http://forums.psychcentral.com/index.php
- PTSD Chatroom: http://www.healthfulchat.org/ptsd-chat-room.html
- PTSD United: http://www.ptsdunited.org/

d. Phone Apps

- ECBT Trauma (iPhone): https://itunes.apple.com/ca/app/ecbt-trauma/id355437454?mt=8
- PTSD Coach: http://www.ptsd.va.gov/PTSD/public/materials/apps/PTSDCoach.asp
- PTSD Eraser (iPhone): https://itunes.apple.com/hk/app/ptsd-eraser/id480699807?mt=8
- T2 Mood Tracker: http://www.t2.health.mil/apps/t2-mood-tracker

10. REVIEWERS

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