



ACUTE STRESS DISORDER (ASD) & POST-TRAUMATIC STRESS DISORDER (PTSD) IN LOCO CREW WHO WERE DIRECTLY INVOLVED IN RAILWAY FATALITIES IN INDIAN RAILWAYS: MEASURES INCLUDING PROFESSIONAL PSYCHOLOGICAL HELP AND SUPPORT IN THE PROCESS OF PSYCHOLOGICAL HEALING

T. Srinivas¹ | Dr. Vijayram Reddy Malladi²

¹ LL.B, M.H.R.M., M.Phil, (Ph.D), Assistant Professor, ITM Business School, Warangal, Telangana State, India

² M.B.B.S., ECFMG, Research Fellow at Harvard Medical School and Research Fellow at Massachusetts General Hospital/Harvard Medical School.

ABSTRACT

Loco crew witnessing a fatal accident causes severe stress in them, with Acute Stress Disorder (within 4 weeks) or later by subsequent Post Traumatic Stress Disorder. Psychological disability caused by stress is likely to affect cognitive and emotional functions like memory, attention, concentration and decision making. Train driver's tasks are without doubt psychologically demanding. Job related psychiatric injury and mental stress is just as serious as physical injuries that are sustained while working. The aim of this paper is to identify the level of ASD and PTSD among loco – pilots (loco crew) who are directly involved in railway fatalities and providing the suitable psychological help & support tailored to the individual cases in the process of rehabilitation.

KEYWORDS: Critical incidents, *Cognitive* behavioural therapy, Neglected Psychology

Introduction

Many jobs are stressful, however, there are some professions that are significantly more so than others. Other professions go beyond stress and can result in psychiatric injury as well. On the job stress can truly take a toll on one's health and leave a person unable to function normally in everyday life. A person who has experienced severe mental stress or psychiatric injury may no longer be able to continue working in their current profession, or may be unable to work at all. Job related psychiatric injury and mental stress is just as serious as physical injuries that are sustained while working. If an employee experienced psychiatric injury or mental stress due to his job, he needs someone on his side that can take him seriously and will advocate for his rights. One may be eligible to file for workers compensation benefits and he may even be eligible to file an additional personal injury claim depending on the circumstances surrounding his injuries.

Train crews, in the course of their work, are likely to be involved in major incidents in which there are injuries and loss of life. There is an increasing body of literature documenting the reactions they may be experienced after critical incidents involving injuries and fatalities. A first step in the development of better interventions to help railway workers, who can be considered collateral victims, is to better understand the factors that contribute to trauma reactions as well as factors that can decrease the risk of negative reactions.

Objectives of the Study

This study addresses two complementary topics.

- the nature of the impact of railway fatalities on rail loco crew and
- interventions to reduce the negative impact on psychological health of loco crew

Methods

The first stage of this project involved the creation of an available database of all railway fatalities in Indian Railways over the past five years and a detailed investigation of the circumstances of the incidents, as well as analyses of the characteristics of the decedents and the location of all incidents. The second stage consisted of an interview study and qualitative analysis of the impact of railway fatalities on rail crew (loco pilots). In the third stage, we conducted complete worldwide literature reviews of strategies to prevent rail fatalities as well as measures to reduce the impact of fatalities on train crew members.

Based upon the first three phases, we developed concrete proposals to test potentially effective strategies to reduce the impact of railway fatalities (disaster resulting in death of passengers) on crew members.

General definition of a critical incident

The scientific literature defines a potentially traumatic event as one that has at least several of the following characteristics:

- The event is sudden and unexpected,
- endangers the person's life or someone else's life
- threatens the person's physical integrity or someone else's physical integrity
- is caused by another person
- creates horror and fear
- induces helplessness and loss of control.

Critical incidents in railways

The following definition is based upon the general literature on critical incidents and trauma reactions and on our analysis of 50 interviews with railway loco crew.

In the context of the railway industry, the best known potentially traumatic events are fatalities caused by a collision with a pedestrian or vehicle. However, collisions with debris that may be mistaken for a pedestrian, with a pedestrian, or with vehicles that did not result in any injury and close calls which had the crew bracing for impact, are also viewed as critical incidents that may induce traumatic reactions. This category also includes fires or explosions that put a worker or co-worker's life at risk of injury or death. What constitutes a critical incident is somewhat subjective and is associated with several factors, such as whether it is personal, work related, social or environmental.

The potential impact of critical incidents on railway crew members

Not everyone who experiences a critical or a potentially traumatic incident will develop a traumatic reaction such as acute stress disorder (ASD) and post traumatic stress disorder (PTSD). ASD and PTSD are only observed in 25% to 35% of people after a traumatic experience. This does not mean that others are symptoms free.

Most people will experience some short/long term effects on their health and well being. Research has shown that individuals can have any of the vast number of traumatic responses which may vary from having no negative reaction (resilience) to developing long term PTSD.

- Resilience
- Stress
- Non diagnosed effect/sub threshold symptoms
- Acute stress disorder (ASD)
- Anxiety
- Depression
- Post traumatic stress disorder (PTSD)

Neglected Psychology

Human reliability is one of the safety critical aspects within railways. The interaction with railway traffic rules, technical safety equipment and management makes up the blend of safety risk factors. Human reliability depends on many factors, one of them being recruitment of train drivers who have the required cognitive, psychomotor and behavioural abilities. For a train driver, particularly in India, the trauma of an accident or running over a trespasser or even a suicide is a memory he can well do without.

Case Study 1:

One loco pilot recalls that his train derailed when he was controlling it at around 40 kph on a down gradient. The wagon bottom door had dropped, capsizing two wagons. He still cannot forget the time when his train ran over a mother - son pair in a suicide. He had a close encounter too when his Durgam Cheruvu Express stopped just 1 meter short of an intruding road earthmover.

Case Study 2:

The author of this paper Prof T. Srinivas's father named T. Dharmiah is a retired mail express driver (loco pilot) in South Central railway zone of Indian railways retired from Dornakal Junction depot of Secunderabad Division on 28th Feb 2004. He retired 11 years back when he is at the age of 60 years of his Super-Annuation. Now he is close to 72 years old, he still often brings to mind the fatal accidents he evidenced in his career.

Case Study 3:

In our survey we come across one Loco Pilot by name Mr. Krishna Swamy, this driver once crossed the interlock signal (IB Signal) when it is red while discharging his duties as a driver in a passenger train called Singareni express travelling from Manikgarh to Badhrachalam Road (BDCR), of course the station master avoided the mishap by alerting the driver and taking the train into the dead line. This critical incident keeps often revising in his mind, visualizing the mishap going to be happened. In such incidents the crew is required to be helped by mental health specialist who diagnoses and treats mental health conditions.

Case Study 4:

Fourteen children were killed when a passenger train rammed into a private school bus at an unmanned railway crossing on 24th July 2014, the mishap happened at around 9.15 a.m. The tragic accident happened when the school bus crossing the unmanned railway crossing in Medak district of Telangana state on Thursday dated 24th July 2014.



Psychological disability caused by stress is likely to affect cognitive and emotional functions like memory, attention, concentration and decision making. These functions, essential in a train driver's work, require optimal work capacity. Indian Railways deploys a psychotest battery at the initial recruitment of Assistant Drivers but scant attention has been paid to developing necessary procedures and tools to help in-service staff.

Acute Stress Disorder and Post Traumatic Stress Disorder in loco crew

Acute Stress Disorder

Typically, emotional responses to disaster develop in the following 4 phases:

- **Impact phase** - Individuals often feel stunned during the first few days; in the first week, disbelief, numbness, fear, and possibly confusion to the point of disorganization occur.
- **Crisis phase** - After the initial impact has been absorbed, individuals can experience a number of feelings; they may alternate between denial and intrusive symptoms with hyper arousal; they may experience somatic symptoms (eg, fatigue, dizziness, headaches, and nausea), as well as anger, irritability, apathy, and social withdrawal; or they may be angry with caregivers who fail to solve problems or who are unable to respond in a fully organized way in the chaos of the crisis.
- **Resolution phase** - Grief, guilt, and depression are often prominent during the first year as individuals continue to cope with their losses.
- **Reconstruction phase** - Reappraisal, assignment of meaning, and integration of the event into a new self-concept occur.

Only a minority of victims of traumatic events have sufficient symptoms to fulfill the diagnostic criteria for acute stress disorder (ASD) or posttraumatic stress disorder (PTSD).

Diagnosis

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*, lists 5 specific diagnostic criteria for ASD.

The **first criterion** is exposure to actual or threatened death, serious injury, or sexual violation in one (or more) of the following ways:

- Directly experiencing the traumatic event(s)
- Witnessing, in person, the event(s) happening to others
- Learning that the event(s) occurred to a close family member or close friend (in cases of actual or threatened death of a family member or friend, the event[s] must have been violent or accidental)
- Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains or police officers repeatedly exposed to details of child abuse).

The **second criterion** is the presence of at least **9 of 14 symptoms from any of 5 categories**—intrusion, negative mood, dissociation, avoidance, and arousal—beginning or worsening after the traumatic event(s) occurred.

(i) Intrusion symptoms include the following:

- Recurrent, involuntary, and intrusive distressing memories of the traumatic event
- Recurrent distressing dreams in which the content or affect of the dream is related to the event
- Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring
- Intense or prolonged psychological distress or marked physiologic reactions in response to internal or external cues that symbolize or resemble an aspect of the traumatic event(s)

(ii) Negative mood consists of the following:

- Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings)

(iii) Dissociative symptoms include the following:

- Altered sense of the reality of one's surroundings or oneself (e.g., seeing oneself from another's perspective, being in a daze, or feeling that time is slowing)
- Inability to remember an important aspect of the traumatic event(s), typically resulting from dissociative amnesia and not from other factors (e.g., head injury, alcohol or drugs)

(iv) Avoidance symptoms include the following:

- Efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s)
- Efforts to avoid external reminders (e.g., people, places, conversations, activities, objects, or situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s)

(v) Arousal symptoms include the following:

Sleep disturbance, Irritable behaviour and angry outbursts, Hyper vigilance, Problems with concentration, Exaggerated startle response.

The **third DSM-5 diagnostic criterion** for ASD is that the duration of the disturbance is 3 days to 1 month after trauma exposure. Although symptoms may begin immediately after a traumatic event, they must last at least 3 days for a diagnosis of ASD to be made.

The **fourth criterion** is that the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

The **fifth and final criterion** is that the disturbance cannot be attributed to the physiologic effects of a substance (e.g., a medication or alcohol) or another medical condition (e.g., mild traumatic brain injury) and cannot be better explained by a diagnosis of brief psychotic disorder.

ASD may progress to PTSD after 1 month, but it may also be a transient condition that resolves within 1 month of exposure to traumatic event(s) and does not lead to PTSD. In about 50% of people who eventually develop PTSD, the initial presenting condition was ASD. Symptoms of ASD may worsen over the initial month can occur, often as a consequence of ongoing stressors or additional traumatic events.

Treating Acute Stress Disorder (ASD)

Basic principles of intervention after emotional trauma include the following:

- Reduce stress by all possible means.
- Support self-esteem; help patients understand that their reaction to the trauma is a normal reaction to an abnormal situation, not a sign of weakness or psychopathology.
- Administer medication (e.g., beta-blockers, alpha-agonists, benzodiazepines, or nonactivating selective serotonin reuptake inhibitors [SSRIs]), if needed, to decrease arousal.
- Avoid increasing stress - Avoid prompting discussion of issues that cannot be resolved; avoid abreaction in groups and the resulting contagion effect; respect defences, and do not force reality on people who cannot handle it yet; keep in mind that debriefing may be harmful.

Psychological and Behavioural Interventions**Debriefing**

Critical incident stress debriefing is one of the most commonly considered interventions after a traumatic event. Classically, critical incident stress debriefing is carried out in 7 stages, as follows:

- i. Introduction (purpose of the session)
- ii. Description of the traumatic event

iii. Appraisal of the event

iv. Exploration of the participants' emotional reactions during and after the event

v. Discussion of the normal nature of symptoms after traumatic events

vi. Discussion of ways of dealing with further consequences of the event

vii. Discussion of the session and formulation of practical conclusions

It should be kept in mind that research efforts have not shown critical stress debriefing to be effective in preventing PTSD, depression, or anxiety. In some cases, if performed poorly, debriefing can even harm survivors by increasing arousal and overwhelming their defenses. Operational debriefing, which focuses on normalizing emotional response, informing patients of services available to them, and providing general support, is safer.

In engaging in a 1- to 2-session intervention after a traumatic event, there are several guidelines that should be followed to help avoid harm and maximize the chance of benefit, as follows:

- Provide trained individuals to perform the intervention
- Avoid ventilating feelings at high levels; this can lead to contagion and flooding rather than calming and improved ability to cope with feelings
- Do not pressure individuals to talk about things they do not want to talk about; respect their defenses, including denial

Critical tasks to cover include the following:

- Psycho education to help patients see that the feelings they are having are not a sign of weakness or mental illness but a normal reaction to a very disturbing situation
- Discussion of ways to improve coping skills, including getting adequate rest, recreation, food, and fluids
- Avoidance of excessive exposure to media coverage of the traumatic incident
- Discussion of common cognitive distortions, such as survivor guilt and fears that the world is totally unsafe
- Explanation of the signs and symptoms indicating that the survivor should get professional help

Cognitive-behavioural therapy

Whereas 70% of those receiving supportive therapy or no therapy after a traumatic event develop PTSD, only about 10-20% of those who receive cognitive-behavioral therapy (CBT) shortly after such an event develop PTSD. Moreover, patients who receive CBT with or without hypnosis report less reexperiencing and fewer avoidance symptoms than patients who receive supportive counseling. Individuals are aided by the following:

- Seeing that people are concerned about them
- Learning about the range of normal responses to trauma and hearing that their emotional reactions are normal responses to an abnormal event (rather than a sign of weakness or pathology)
- Being reminded to take care of concrete needs (eg, food, fluids, and rest)
- Cognitive restructuring (changing destructive schema to more constructive ones [see the Table below])
- Learning relaxation techniques
- Undergoing exposure to avoided situations either via guided imagery and imagination or in vivo

- Desensitization to painful memories via repeated controlled exposures and systematic desensitization

Medications for ASD

The use of medications to decrease arousal and insomnia may have a long-term impact.

Beta blockers (as well as alpha-adrenergic agents) may limit hyperarousal both initially and over the longer term. For extreme agitation, aggression, psychosis, or dissociation, an atypical neuroleptic or mood stabilizer may be needed.

Diphenhydramine and other medications may be helpful for improving sleep. Benzodiazepines, by limiting hyperarousal and fostering sleep, can be helpful in the initial stages; however, continuous administration may interfere with grieving and readaptation, because these agents can interfere with learning. Longer-acting agents are particularly beneficial when medication is administered at the emergency site and follow-up treatment is in short supply.

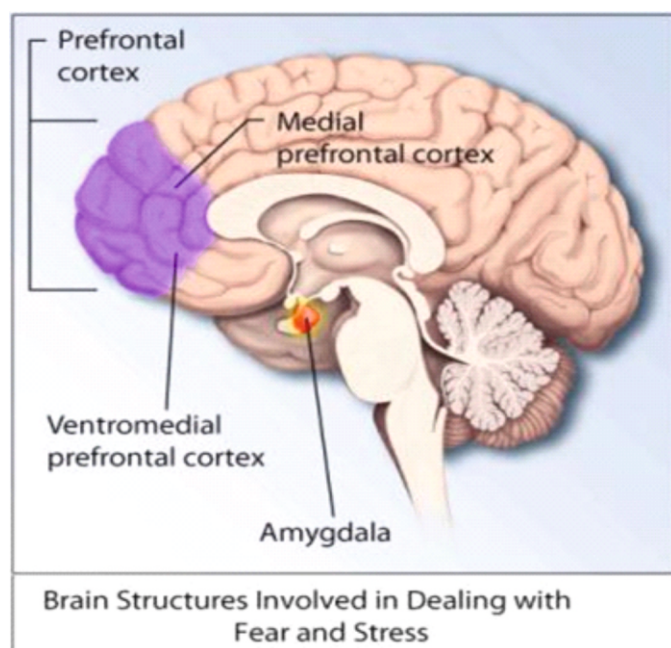
SSRIs can be helpful in dealing with the core symptoms (including anxiety, depression, withdrawal, and avoidance) and can play a central role in longer-term treatment.

Co-morbid conditions such as attention deficit hyperactivity disorder (ADHD) should be targeted. Reduction in even 1 disabling symptom (e.g., insomnia or hyperarousal) may have a powerful positive impact on the individual's ability to re-compensate.

Post-Traumatic Stress Disorder (PTSD)

Posttraumatic stress disorder (PTSD) is defined as a pathological anxiety that usually occurs after an individual experiences or witnesses severe trauma that constitutes a threat to the physical integrity or life of the individual or of another person.

Brain structures associated with the body's reaction to fear and stress can be seen in the image below.



Diagnosis

Currently, diagnosis of PTSD is based on 8 criteria from *the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.

The **first DSM criterion** has 4 components, as follows:

- Directly experiencing the traumatic event(s)
- Witnessing, in person, the event(s) as it occurred to others
- Learning that the traumatic event(s) occurred to a close family member or friend

- Experiencing repeated or extreme exposure to aversive details of the traumatic event(s); this does not apply to exposure through media such as television, movies, or pictures.

The **second criterion** involves the persistent reexperiencing of the event in 1 of several ways: Thoughts or perception, Images, Dreams, Illusions or hallucinations, Dissociative flashback episodes, intense psychological distress or reactivity to cues that symbolize some aspect of the event.

The **third criterion** involves avoidance of stimuli that are associated with the trauma and numbing of general responsiveness, as determined by the presence of 1 or both of the following:

- Avoidance of thoughts, feelings, or conversations associated with the event
- Avoidance of people, places, or activities that may trigger recollections of the event

The **fourth criterion** is 2 or more of the following symptoms of negative alterations in cognitions and mood associated with the traumatic event(s):

- Inability to remember an important aspect of the event(s)
- Persistent and exaggerated negative beliefs about oneself, others, or the world
- Persistent, distorted cognitions about the cause or consequences of the event(s)
- Persistent negative emotional state
- Markedly diminished interest or participation in significant activities
- Feelings of detachment or estrangement from others
- Persistent inability to experience positive emotions

The **fifth criterion** is marked alterations in arousal and reactivity, as evidenced by 2 or more of the following:

- Irritable behaviour and angry outbursts
- Reckless or self-destructive behaviour
- Hyper vigilance
- Exaggerated startle response
- Concentration problems
- Sleep disturbance

The **remaining 3 criteria** are as follows:

- The duration of symptoms is more than 1 month
- The disturbance causes clinically significant distress or impairment in functioning
- The disturbance is not attributable to the physiological effects of a substance or other medical condition

Symptoms of post-traumatic stress disorder (PTSD)

The symptoms of post-traumatic stress disorder (PTSD) can have a significant impact on your day-to-day life. In most cases, the symptoms develop during the first month after a traumatic event. However, in a minority of cases, there may be a delay of months or even years before symptoms start to appear. Some people with PTSD experience long periods when their symptoms are less noticeable, followed by periods where they worsen. Other people have severe symptoms that are constant.

The specific symptoms of PTSD can vary widely between individuals, but they generally fall into the categories described below.

Re-experiencing

Re-experiencing is the most typical symptom of PTSD. This is when a person involuntarily and vividly re-lives the traumatic event in the form of flashbacks, nightmares or repetitive and distressing images or sensations. This can even include physical sensations such as pain,

sweating and trembling. Some people will have constant negative thoughts about their experience, repeatedly asking themselves questions that prevent them from coming to terms with the event. For example, they may wonder why the event happened to them and if they could have done anything to stop it, which can lead to feelings of guilt or shame.

Avoidance and emotional numbing

Trying to avoid being reminded of the traumatic event is another key symptom of PTSD. This usually means avoiding certain people or places that remind you of the trauma, or avoiding talking to anyone about your experience. Many people with PTSD will try to push memories of the event out of their mind, often distracting themselves with work or hobbies. Some people attempt to deal with their feelings by trying not to feel anything at all. This is known as emotional numbing. This can lead to the person becoming isolated and withdrawn, and they may also give up pursuing the activities that they used to enjoy.

Hyper arousal (feeling 'on edge')

Someone with PTSD may be very anxious and find it difficult to relax. They may be constantly aware of threats and easily startled. This state of mind is known as hyper arousal. Hyper arousal often leads to irritability, angry outbursts, SLEEPING PROBLEMS (insomnia) and difficulty concentrating.

Other problems

Many people with PTSD also have a number of other problems, including:

- depression, anxiety and phobias
- drug misuse or alcohol misuse
- headaches, dizziness, chest pains and stomach aches

PTSD sometimes leads to work-related problems and the breakdown of relationships.

Acute PTSD: if duration of symptoms is less than 3 months

Chronic PTSD: if duration of symptoms is 3 months or more

Of the 50 train crew members interviewed, only 10 reported being diagnosed with PTSD.

Treating post-traumatic stress disorder (PTSD)

The main treatments for post-traumatic stress disorder (PTSD) are psychotherapy and medication. Traumatic events can be very difficult to come to terms with, but confronting your feelings and seeking professional help is often the only way of effectively treating PTSD. It is possible for PTSD to be successfully treated many years after the traumatic event occurred, which means it is never too late to seek help.

Assessment

Before having treatment for PTSD, a detailed assessment of your symptoms will be carried out to ensure treatment is tailored to your individual needs. Your GP will often carry out an initial assessment, but you will be referred to a mental health specialist for further assessment and treatment if you have had symptoms of PTSD for more than four weeks or your symptoms are severe.

There are a number of mental health specialists you may see if you have PTSD, such as:

- **a psychologist** - an expert in how the mind works
- **a community psychiatric nurse** - a nurse who specialises in mental healthcare
- **a psychiatrist** - a mental health specialist who diagnoses and treats mental health conditions

Watchful waiting

If you have mild symptoms of PTSD, or you have had symptoms for less than four weeks, an approach called watchful waiting may be recommended. Watchful waiting involves carefully monitoring your symptoms to see whether they improve or get worse. It is sometimes recommended because 2 in every 3 people who develop problems after a traumatic experience will get better without treatment within a few weeks. If watchful waiting is recommended, you should have a follow-

up appointment within one month.

Psychotherapy

If you have PTSD that requires treatment, psychotherapy is usually recommended first. A combination of psychotherapy and medication may be recommended if you have severe or persistent PTSD. Psychotherapy is a type of therapy often used to treat emotional problems and mental health conditions such as PTSD, depression, anxiety and disorder. The treatment is carried out by trained mental health professionals who will listen to you and help you come up with effective strategies to resolve your problems.

Several types of psychotherapy, also called talk therapy, may be used to treat children and adults with PTSD. Some types of psychotherapy used in PTSD treatment include:

Cognitive behavioural therapy (CBT)

Cognitive behavioural therapy (CBT) is a type of therapy that aims to help you manage your problems by changing how you think and act. Trauma-focused CBT uses a range of psychological treatment techniques to help you come to terms with the traumatic event. For example, your therapist may ask you to confront your traumatic memories by thinking about your experience in detail. During this process your therapist will help you cope with any distress you feel, while identifying any unhelpful thoughts or misrepresentations you have about the experience. By doing this, your therapist can help you gain control of your fear and distress by changing the negative way you think about your experience, such as feeling that you are to blame for what happened or fear that it may happen again.

You may also be encouraged to gradually restart any activities you have avoided since your experience, such as driving if you had an accident.

You will usually have 8-12 weekly sessions of trauma-focused CBT, although fewer may be needed if the treatment starts within one month of the traumatic event. Sessions where the trauma is discussed will last for around 90 minutes.



Exposure therapy

This behavioural therapy helps you safely face what you find frightening so that you can learn to cope with it effectively. One approach to exposure therapy uses "virtual reality" programs that allow you to re-enter the setting in which you experienced trauma.

Eye movement desensitization and reprocessing (EMDR)

Eye movement desensitization and reprocessing (EMDR) is a relatively new treatment that has been found to reduce the symptoms of PTSD. EMDR involves making side-to-side eye movements, usually by following the movement of your therapist's finger, while recalling the traumatic incident. It is not clear exactly how EMDR works, but it

may help the malfunctioning part of the brain (the hippocampus) to process distressing memories and flashbacks so that their influence over your mind is reduced.

Medications

Several types of medications can help improve symptoms of PTSD:

- Antidepressants. These medications can help symptoms of depression and anxiety. They can also help improve sleep problems and concentration. The selective serotonin reuptake inhibitor (SSRI) medications sertraline (Zoloft) and paroxetine (Paxil) are approved by the Food and Drug Administration (FDA) for PTSD treatment.
- Anti-anxiety medications. These drugs also can improve feelings of anxiety and stress for a short time to relieve severe anxiety and related problems. Because these medications have the potential for abuse, they are not usually taken long term.
- Prazosin. If symptoms include insomnia or recurrent nightmares, a drug called prazosin (Minipress) may help. Although not specifically FDA-approved for PTSD treatment, prazosin may reduce or suppress nightmares in many people with PTSD.

DRIVING WITH ANXIETY / POST-TRAUMATIC STRESS DISORDER (PTSD)

People who have been in severe motor-vehicle accidents can develop anxiety towards driving or even being a passenger in a vehicle. In some cases, if the anxiety is severe, screening for Post-Traumatic Stress Disorder (PTSD) may be recommended. PTSD is more prevalent than most people realize and its symptoms can last for decades if not attended to, affecting many areas of life, including the ability to safely return to driving.

Common factors that can affect safe driving:

- Fear of driving or being in a car
- Difficulty concentrating
- Insomnia
- Nervousness and anxiety
- Persistent thoughts about the accident

Occupational therapists have training in emotional and mental health issues; however most that specialize in this field also have extra training for working with persons with driving anxiety. Occupational therapists assist clients using a systematic desensitization and graded treatment plan to return to person to driving comfortably and safely. Sometimes, the occupational therapist works collaboratively with a psychologist. A driver rehabilitation specialist can provide a comprehensive evaluation and make recommendations regarding driving. The goal is feeling comfortable, being independent and safe while driving.

The assessment should include:

- Review of current issues with respect to driving
- Review of medications
- Functional ability
- Vision
- Perception
- Reaction time
- Behind-the-wheel evaluation

Conclusion:

The results of the study indicates that the driver (loco crew), witness to a person being killed, frequently suffers long-lasting psychological consequences of the accident. Witnessing a fatal accident causes severe stress in most people, with Acute Stress Disorder (within 4 weeks) or later by subsequent Post Traumatic Stress Disorder. It is evident that measures including professional psychological help and support (psychotherapy) are important components in the psychological healing process after such an accident.

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