Full Length Research Paper

Role of energy psychology in treatment of road accident trauma

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Stress reactions after a road accident may include the diagnosis of post-traumatic stress disorder (PTSD), depression and anxiety disorders, as well as other psychiatric conditions such as prolonged grief reactions, somatisation and substance abuse. This paper reviews the approach, considers the viability and offers a framework for applying energy psychology in treating road accident trauma patients. Energy psychologies have been dubbed "power therapies" because they work so quickly compared to the traditional talk therapy. This appears to be partially because they target the more primitive parts of the brain - the limbic system, medulla oblongata and Enkephalin system, which is in every cell of the body.

Key words: Energy psychology, road accident, trauma, therapy.

INTRODUCTION

The World Health Organization has revealed in its first ever Global Status Report on Road Safety that more people die in road accidents in India than anywhere else in the world. The statistics for India regarding road accidents are chilling. At least 13 people die every hour in road accidents in the country, the latest report of the National Crime Records Bureau reveals (NCRB).

The number of vehicles registered in India is shown in Table 1. Table 2 shows the sales of motor vehicles in India in 1997 and 2007. The sales figures also show an average annual increase of 10 - 12% per year.

Table 3 shows the number of road traffic fatalities and the population of India from 1997 to 2007. The total number of fatalities increased at an average rate of about 4% per year in the period 1997 - 2003 and the rate has increased to 8% per year since then. The number of fatalities per million population remained around 79 - 83

in the period 1997 - 2003 and has since increased to 101.

As per the annual NCRB report, road accidents had the maximum (37.1%) share of unnatural causes of accidental deaths in the country. The impact of the accidents is not only immediate but has long term effect in many cases.

The impact of road accidents can be broadly categorized as in Figure 1.

Multiple impacts of road injury

Road injury impacts on the indigenous community at multiple levels. Direct effects can be measured in terms of deaths, hospitalisations and associated disabilities. Additional effects include emotional stress and psychological impact of the injury on individuals, family members and close-knit community groups. Particularly when long-term care is needed, secondary impacts can result in reduced quality of life for carers. Financial stress can also occur as a result from loss of labour, medical and legal costs and vehicle repairs. The impact can be particularly immense if a driver is killed or seriously

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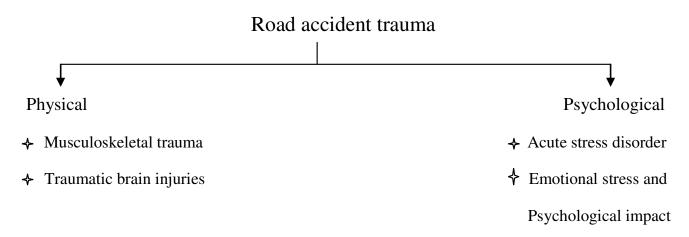


Figure 1. Impact of road accidents.

Table 1. Motor vehicle registration in India (Mohan, 2009).

Year	MTW*	Cars/Jeeps	Trucks	Buses	Others**	Total
1997	25,729 (69)***	4,67 2 (13)	2,343 (6)	484 (1.1)	4,104 (11)	37,332 (100)
2004	51,922 (71)	9,451 (13)	3,749 (5)	768 (1.3)	6,828 (09)	72,718 (100)
Growth/year (%)	10.6	10.6	6.9	6.8	7.5	10.0

^{*} Motorised two-wheelers ** Others include tractors, trailers, three wheelers and other miscellaneous vehicles which are not separately classified. *** Numbers in parentheses represent row percentages. Source: Ministry of Road Transport and Highways, Delhi.

Table 2. Vehicle sales in India (Mohan, 2009).

Year	Motorised two-wheelers	Three-wheelers	Cars	Commercial vehicles	Total
1997	2,88 5,004 (79)	216,729 (06)	396,450 (11)	169,937 (5)	3,668 ,120 (100)
2007	7,416,191 (78)	380,66 3 (04)	1,273,89 3 (13)	479,593 (5)	9,550,340 (100)
Growth/year (%)	10	6	12	11	10

Source: Society of Indian Automobile Manufacturers, Delhi.

injured, reducing the already limited number of drivers available to a community. The effect on indigenous police who are required to attend road-crash scenes provides a further example of the potential impact of road trauma.

A stressful road accident exposure may exacerbate preexisting psychiatric conditions, trigger a latent disorder or cause psychic vulnerability to later stressful events. For many years 'acute stress debriefing' was the intervention of choice for road accident victims. However, research about its efficacy has failed to show any positive outcome. Here we discuss energy psychology as an emerging technique for the treatment of road accident related trauma. The term "energy psychology" refers to a number of related energy therapies that are based on the Chinese Meridian system of medicine. Energy psychology quickly and thoroughly relieves mental health

problems by eliminating emotional traumas or blockages from the mind/body continuum by touching or tapping key points on the body.

Energy psychology utilizes cognitive operations such as imagery exposure to traumatic memories or visualization of optimal performance scenarios-combined with physical interventions derived from acupuncture, yoga, and related systems-for inducing psychological change. It includes a variety of protocols (at least two dozen variations have been identified) that generally fall within the field of energy medicine (Feinstein and Eden, 2008), much as psychiatry is a specialty within conventional medicine.

Energy medicine is recognized by the National Institutes of Health (NIH) as a form of "complementary and alternative medicine" that is based on the supposition

Table 3. Road traffic fatalities in India (Mohan, 2009).

Year	Fatalities	Population (million)	Fatalities/million persons
1997	77 ,000	955	81
1998	79,900	971	82
1999	82,000	987	83
2000	78,900	1,002	79
2001	80,900	1,027	79
2002	84,059	1,051	80
2003	84,430	1,068	79
2004	91,376	1,086	84
2005	98,254	1,103	89
2006	105,725	1,120	94
2007	114,590	1,136	101

Source: National Crime Records Bureau, Delhi.

that illness results from disturbances in the body's electromagnetic energies and energy fields (National Center for Complementary and Alternative Medicine of NIH, 2005).

Energy psychology focuses on these energies for the purpose of alleviating psychological problems and pursuing personal goals.

Body's energies include the electrical charge in every cell and organ, the electrical pathways in the nervous system, the electromagnetic fields surrounding every organ as well as the entire body and also more subtle energies such as the chi spoken of by acupuncturists and the prana spoken of by yoga practitioners. With psychological problems, an experience one regularly encounters causes the brain to send out electrical signals that lead to an emotion (perhaps anxiety, depression, or anger), a perception, or a behavior that is not appropriate for the current situation. The triggering experience may be one encountered with some frequency, such as situations where is being confronted or tested. It may also be internal, a recurring memory, image, or thought. One way to approach the problem is to work directly with the energies that maintain the pattern in the brain's response to the triggering experience. This is the approach used in energy psychology.

If every time one thinks about a particular situation, certain parts of the brain become over-stimulated, leading to emotions that get in one's way, we can have one think about the situation while one touches or taps or massages trigger points that alter the dysfunctional response in one's brain. This retrains the body and brain so that the thought or situation no longer causes the over-reaction. The trigger points, incidentally, are often the same points that are used in acupuncture, though needles are not necessary to achieve the desired effect. This process alone can overcome many emotional and psychological problems.

The most well-known variations are Thought Field Therapy (TFT), the Emotional Freedom Techniques

(EFT), Neuro Emotional Technique (NET) and the Tapas Acupressure Technique (TAT). TFT, EFT, and TAT have been by far the most widely utilized and investigated EP approaches.EFT, TFT, and NET all work by accessing the mind/body matrix or Meridian System in Chinese medicine.

Chinese medicine addresses the body's need for balance or homeostasis. If the Chi or energy of the body is in balance then it is assumed that the body will be able to cure itself and run at top efficiency. Practitioners assess the body's balance by testing acupressure or acupuncture points in the body, which are divided up into 12 main meridian systems. These meridian systems are named for the main organs of the body such as the Lung Meridian or the Liver Meridian. Each of these systems corresponds with particular emotions. For example, the lung meridian is associated with grief and sorrow and the liver meridian with anger and resentment. Through a process of tapping acupuncture points on the body, trauma is relieved and homeostasis is reestablished.

Thought Field Therapy, or TFT, a fringe psychological treatment, is one of the earliest formulations of EP, developed by an American psychologist, Roger Callahan (Callahan, 2002). It can heal a variety of mental and physical ailments through specialized "tapping" with the fingers at meridian points on the upper body and hands.

EFT (Emotional Freedom Techniques) is a streamlined variation of TFT that can be used by the general public outside clinical settings, originated by Gary Craig after studying with Callahan. EFT is an easy yet effective method that allows quick release of negative emotions.

It involves tapping on certain meridian points that communicate energetic information throughout the human body while focused on the emotion we want to release (Callahan, 2002).

It is a type of "psychological acupressure" that uses gentle tapping on certain meridian endpoints on the body to relieve psychological distress and physical pain. While verbalizing the identified problem, the client taps on

Table 4. Thoug	nt field therapy	(Feinstein, 2006).
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Country	No. of clients	No. of people treated successfully	Number of traumatic incidents identified	Number of incidents from which the person reported relief
Kosovo	189	187	547	545
South Africa	97	97	315	315
Congo	29	28	78	77
Rwanda	22	22	73	73

designated points located on the face and body, which restores balance to the energy system. This then, neutralizes emotional conflicts at their source.

NET or Neuro Emotional Technique theory postulates that we create our own reality and therefore are responsible for our own story.

Even if the story of past abuse when a person is a child is accurate and valid we are still responsible for repeating it if we do not deactivate the repetition compulsion and neutralize the energy that is stuck (Carrington, 2005).

TAT (Tapas Acupressure Techniques) was developed by acupuncturist Tapas Fleming. All three utilize nonneedle methods of stimulating acupuncture points (acupoints) for the purpose of inducing positive psychological change (Callahan, 2002).

It is a simple, easy method for transforming beliefs changing one's life experience. By touching potent acupressure points on the head while putting one's attention on a few key intentions, identification and connection with traumas and limiting beliefs effortlessly dissolve. This process naturally centers a person in their own inner peace and happiness. New intentions and connections with oneself and life produce vibrant mental. emotional, physical and spiritual health and often manifest with innocent joy. In a study funded by the NIH (National Institutes of Health) and conducted by Kaiser Permanente, TAT was proven the most effective approach studied for maintaining weight establishing it as a powerful behavior modification technique.

This combination purportedly brings about, with unusual speed and precision, therapeutic shifts in affective, cognitive, and behavioural patterns that underlie a range of psychological concerns. Energy Psychology can be used as an immediate as well as long term measure for treating road accident survivors.

Carl Johnson, PhD, a clinical psychologist retired from a career as a PTSD (post-traumatic stress disorder) specialist with the Veteran's Administration, has traveled over the past six years to the sites of some of the world's most terrible atrocities and disasters to provide psychological support based in energy psychology methods.

About a year after NATO put an end to the ethnic cleansing in Kosovo, Johnson found himself in a trailer in a small village where the atrocities had been particularly

severe.

The Kosovo data

The first 105 people treated in Kosovo by Johnson and his colleagues were followed for 18 months after their treatments. The results are astounding. These 105 victims of ethnic violence were suffering from the post-traumatic emotional effects of 249 discrete, horrific, self-identified incidents, from torture and rape to witnessing the massacre of loved ones. For 247 of those 249 memories, the treatments using Thought Field Therapy, an early formulation of energy psychology developed by Roger Callahan, PhD, in the early 1980s) successfully reduced the level of emotional distress not just to a manageable level but to a "no distress" level ("0" on a 0 to 10 "Subjective Units of Distress" scale). The memories, of course, remained, and although they were no less horrific, they were no longer emotionally disabling.

The chief medical officer of Kosovo (the equivalent of the U.S. Surgeon General), Dr. Shkelzen Syla, stated in a Many well-funded appreciation: organizations have treated the post-traumatic stress here in Kosovo. Some of our people had limited improvement, but Kosovo had no major change or real hope until we referred our most difficult trauma patients to Dr. Johnson and his team. The success from Thought Field Therapy was 100% for every patient, and they are still smiling until this day and indeed, in the follow-ups, each was free of relapse. Johnson kept a simple but ultimately provocative set of statistics during his visits to Kosovo and other areas of ethnic cleansing, warfare, and natural disasters: (1) Number of people treated 2) Number of people treated successfully (hyperarousal to traumatic memories neutralized) 3) Number of traumatic incidents identified 3) Number of incidents from which the person reported relief. Here is his tally to date (Table 4).

METHODOLOGY

The treatment by EP can be performed in different levels or tiers as per the need of the patient, that is, either as an immediate emotional aid or to overcome post traumatic stress disorder. Four

tiers of energy psychology interventions include: 1) immediate relief/stabilization. 2) extinguishing conditioned responses. 3) overcoming complex psychological problems and 4) promoting optimal functioning. The first tier is most pertinent in psychological first aid immediately following a road accident, with the subsequent tiers progressively being introduced over time with complex stress reactions and chronic disorders.

Energy psychology, as most commonly practiced in clinical and post-accident situations, is an exposure-based treatment.

In energy psychology, as with other exposure-based treatments, exposure is achieved by eliciting-through imagery, narrative, and/or in vivo experience hyper arousal associated with a traumatic memory or threatening situation. Unique to energy psychology is that extinction of this association is facilitated by the manual stimulation of acupuncture or related points that are believed to send signals to the amygdala and other brain structures that quickly reduce hyper arousal. When the brain then reconsolidates the traumatic memory, the new association (to reduce hyper arousal or no hyper arousal) is retained.

According to practitioners, this leads to treatment outcomes that are more rapid (less time; fewer repetitions) and more powerful (higher impact; greater reach) than the strategies used by other exposure-based treatments that are available to them, such as relaxation, desensitization, mindfulness, flooding, or repeated exposure.

Another clinical strength reported by practitioners is increased precision, and thus less chance of re-traumatisation.

By being able to quickly reduce hyper arousal to a targeted stimulus, numerous aspects or variations of a problem may be identified, precisely formulated, and treated within a single session.

While empirical validation for the effectiveness of the use of acupressure points in energy psychology is still in a relatively early stage, striking treatment successes in the aftermath of severe trauma are being reported by a broad range of credible sources, giving the psychotherapy community cause to assess the method before conclusive research is available.

Four tiers of EP

A review of the major EP texts (Callahan and Trubo, 2002; Diepold et al., 2004; Feinstein, 2004; Feinstein et al., 2005; Gallo, 2002, 2004; Mollon, 2008) shows four tiers of EP interventions: (1). Immediate relief/stabilization: Much as a paramedic might instruct a patient having an anxiety attack in a breath control technique that is incompatible with hyperventilation, EP utilizes in vivo interventions believed to be incompatible with limbic hyper arousal. Tapping on specified acupuncture points whose stimulation has been shown to decrease activation signals in the amygdala (Hui et al., 2000), for instance, appears to rapidly decrease elevated emotional responses in stressful situations. This simple procedure is proving itself to be a potent intervention for providing psychological first aid in the immediate aftermath of road accident. (2). Extinguishing conditioned responses: Similar techniques are applied for extinguishing a maladaptive conditioned response, such as a phobia or irrational rage. EP exposure treatments target the response to internal or external cues that trigger dysfunctional fear, aggression, or avoidance. By eliminating the limbic hyper arousal caused by the triggering cue, associated problematic affective, cognitive and behavioural patterns may be interrupted. (3) Overcoming complex psychological problems: An EP approach identifies and targets salient aspects of complex problems. Aspects of low self-esteem, for instance, might include unresolved memories of parental emotional abuse, self-defeating beliefs, exaggerated appraisals of interpersonal threat and anxiety in social situations. The combination of acupoint stimulation with the mental activation of carefully selected scenes, feelings, or beliefs may be applied to the elements of a complex psychological problem, one by one. (4). Promoting optimal functioning: Beyond its uses in helping people

cope with and overcome psychological problems, EP interventions may be applied to alter self-concept, affect and motivation in ways that promote confidence, optimism, courage, peak performance, social skills, and feelings of spiritual connectedness. At these third and fourth tiers, EP is often integrated with other clinical or personal development approaches.

In treating obsessive-compulsive disorders, for instance, strategies from Cognitive Behaviour Therapy (CBT) may provide a framework as EP techniques are employed for rapidly reducing activation in response to specific cues. In enhancing personal resilience, strategies from Positive Psychology (such as the "building of buffering strengths" like perseverance or a capacity for pleasure) (Seligman, 2002) may provide a framework as EP techniques are employed to instill such strengths.

Recently EP has been found to be very effective in the treatment of phobias like Acrophobia in as short period of time as 30 min (Feinstein, 2005). Also, it has been effectively used in treating DID (Dissociative Identity Disorder). This is a condition, usually resulting from severe and repeated childhood trauma, in which the normally integrated and communicative processes and parts of the psyche have become dissociated.

For a person with DID, even talking about their inner world of dissociation and traumatic experience could be further destabilizing (Mollon, 2009). The use of tapping or other energy modalities is soothing, helping to reduce tension and terror within the client's system. This can at times be done in a non-specific way by just tapping sequences of points without any particular focus. Ordinary EFT points can be used, or, if the practitioner is able to sense sequences of points (as with TFT), then these can be applied. As the client becomes used to this procedure, he or she will experience increased confidence that anxiety and trauma can be contained. This will enhance feelings of safety, especially if there is no pressure from the therapist.

Conclusion

Energy therapies free these feelings of powerlessness from a road accident patient especially handicapped after the accident so he is no longer stuck in immobility. There is no doubt that energy psychology has a powerful impact on those who experience trauma. Anyone who works with the therapy witnesses its success daily. Energy methodology, though just beginning to have the research to back it up, does have enough evidence to support its use for those who desperately need it. It is time to take it to the victims of road accident so that they may move on with their lives and be productive citizens in their society. The implications of the energy psychology intervention described in the case study can be used for research, health policy formation and education of clinicians.

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