

Psychological Management of Combat Stress – A Study Based on Sri Lankan Combatants

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Introduction

The Democratic Socialist Republic of Sri Lanka is an island in the Indian Ocean about 28 kilometers (18 mi.) off the southeastern coast of India with a population of about 19 million. Sri Lanka is shattered by an internal conflict which claimed 65,000 lives over 20 years. Many Psychiatrists claim that this conflict has a direct impact on mental health indicators. In the aftermath of the ethnic conflict many people in the military, paramilitary and civil society have undergone severe stressful events beyond usual human experience.

Sri Lanka's conflict has its own specifications. It is a conflict between two ethnic groups. The Northern conflict may be one of the longest lasting conflicts of the 20th century. Sri Lankan military forces are the only force in the world where its entire bayonet strength have continuously been deployed for nearly 20 years. The psychological trauma experienced by the military is colossal.

The combat operations in the North and East have involved military personnel in major ground combat and hazardous security duty. Studies are needed to systematically assess the mental health of members of the armed services who have participated in the warfare. There are few published studies of the rates of PTSD among military personnel soon after their return from combat duty.

Methods

We have studied 824 members of Army infantry and services units who were referred to the Psychology Unit military Hospital Colombo (2002 Aug to 2005 March) using an anonymous survey that was administered to the subjects. The outcomes included major depression, generalized anxiety, and post-traumatic stress disorder (PTSD) which were evaluated on the basis of standardized, self-administered screening instruments. The study groups included 824 soldiers and obtained informed consent and the methods used ensured participants' anonymity. The study was conducted under the direct supervision of the Consultant Psychiatrist of the Sri Lanka Army.

DSM-IV diagnostic criteria for PTSD require that a minimum number of symptoms from each cluster be present (one or more re-experiencing symptoms; three or more avoidance/numbing symptoms; two or more hyper-arousal symptoms) and that they coexist for at least 1 month after the trauma and are associated with significant distress or functional impairment (*Association: Diagnostic and Statistical Manual of Mental*

Disorders, 4th edition. Washington, DC, American Psychiatric Association, 1994). Symptoms that have been present for 1 to 3 months are termed *acute*, whereas those that persist beyond 3 months are considered *chronic*. The development of symptoms 6 months or more after the trauma is termed *delayed onset*. Similar criteria have been set forth by the World Health Organization (*World Health Organization: The ICD-10 Classification of Mental and Behavioral Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva, Switzerland, World Health Organization, 1992*)

The presence or absence of PTSD was evaluated with the use of the PTSD Checklist (Based on DSM 4 Criteria) Results were scored as positive if subjects reported at least one intrusion symptom, three avoidance symptoms, and two hyperarousal symptoms that were categorized as at the moderate level, according to the PTSD checklist. In addition to these measures, on the survey participants were asked whether they were currently experiencing stress, emotional problems, problems related to the use of alcohol, or family problems

Results

Exposure to combat was significantly greater among those who were deployed in the North and East of Sri Lanka. The percentage of study subjects whose responses met the screening criteria for major depression, generalized anxiety, or PTSD was significantly higher after serving in the above mentioned areas. PTSD was identified in 62 combatants (56 with full blown symptoms and 6 with partial PTSD)

- ***Total Number of PTSD patients- 56***
- Those who have served in the operational areas (for more than 3 years) -45
- Sustained grievous injuries -15
- Sustained none grievous injuries - 22
- Witnessed Killing- 49
- Past attempted suicides- 17
- Alcohol abuse-5
- Addicted to cannabis- 8
- Spouse abuse-13
- History of childhood trauma -30

The standard Studies

A national study of American civilians conducted in 1995 estimated that the life time prevalence of PTSD was 5% in men and 10% in women. The studies of veterans conducted years after their service ended have shown a prevalence of current PTSD of 15 percent among Vietnam veterans¹ and 2 to 10 percent among veterans of the first Gulf War.^{2,3}

The nature of the Sri Lankan Conflict

The history and nature of the Sri Lankan conflict is more complicated. The first overt act of terrorism took place with the killing of the Mayor of Jaffna in 1975 by the LTTE (Liberation Tigers of Tamil Eelam) leader V. Prabhakaran. By 1977 militant groups were formed and their main intention was racial separation. In 1982 the LTTE became the leading separatist armed group.

The new form of battle stress began mainly after 1983. In 1983, the death of 13 Sinhalese soldiers in the North as a result of the LTTE attack unleashed the biggest outbreak of communal violence in the country's history. By mid-1987, India intervened in the conflict. India agreed to establish order in the north and east with an IPKF (Indian Peace Keeping Force). Fighting between the LTTE and the IPKF escalated in the North. India withdrew the last of its forces from Sri Lanka in early 1990, and fighting between the LTTE and the government resumed. By mid-1996 government forces liberated Jaffna from LTTE. An LTTE counteroffensive begun in October 1999 and heavy fighting continued until 2001.

Armed Forces

Army's strength includes reservists on active duty, nearly 168662 personnel, major tactical units' five infantry brigade-sized task forces, each with three battalions. Other formations include one or two battalion-sized reconnaissance regiments, plus artillery, engineer, signals, medical and logistical units. Naval service is organized administratively into three naval area commands: Northern, Eastern, Southern and Western with the main naval base at Trincomalee, smaller installations at Karainagar, Tangalla, and Kalpitiya, Air Force: Total strength, including reservists on active duty, nearly 9,000 personnel deployed at 3 large and 9 smaller airbases countrywide, principal air force missions tactical air support for ground operations, military airlift, and medical evacuation.

Major Military operations conducted by the Sri Lanka Army

- 1) Operation Liberation – (1987) -The overall plan for Operation Liberation was to clear the areas in the Jaffna Peninsula. This operation was half way stopped due to Indian involvement.
- 2) Operation Sea Breeze – This operation was launched to save the Mulative camp
- 3) Operation Trivida Balaya - Main objective was to save the 6 SLSR (Sri Lanka Singha Regiment) who were trapped in the Jaffna Fort.
- 4) Operation Balawegaya – Jul 1991 Elephant Pass camp came under attack and Operational task was to give back up support to the troops at Elephant Pass.
- 5) Operation Valampuri -1992

- 6) Operation Akunupahara-1992
- 7) Operation Hayepahara-1993
- 8) Operation Safe Passage-1995
- 9) Operation Leap Forward- 1995
- 10) Operation Thunder Strike-1995
- 11) Operation Rivirasa 1, 2 &3 – 1995 (Main task is to liberate Jaffna)
- 12) Operation Sathjaya- 1996
- 13) Operation Edibala 1997
- 14) Operation Jayasikuru- 1997 Operation 'Jaya Sikurui' or 'Victory Assured', to recapture the main highway through the Vanni from Vavuniya to Jaffna began on the 13th of May 1997) 'Operation Jaya Sikurui' was the largest ever military operation undertaken by Sri Lankan security forces and involved over 20,000 soldiers, Navy, Police, Air Force and other Para military groups.
- 15) Operation Rivibala- 1998
- 16) Operation Ranagosa 1, 2 & 3 -1999
- 17) Operation Rivikirana- 2000
- 18) Operation Agnikeela 2001

Total number of KIA in the Army	17066
Total numbers of disabled (Officers 9220 /Soldiers 20266)	29486
Deaths among the LTTE	17903

Combat Stress

The concept of stress has come full circle through history. In ancient Greece, the philosopher Epictetus described stress on a psychological basis with the following words: "People are disturbed not by things but by the views they take of them."

Combat stress is a specific stress factor that can affect the mental and physical health of the combatants. Rigorous Combat stress is a form of psychological pathology that is resulted from traumatic exposure to battle events. Combat stress is the result of internal and external stressors. Combat stresses do not come from the enemy actions alone. Some of the stresses are generated from the soldier's own units and the mission demands.

The Concept of War

Psycho-dynamically war is a form of severe stress that can cause, even in previously stable personalities, temporary personality de-compensation, leading to transient stress reaction (Prof Daya Somasundaram in Broken Palmyhra). War is a life threatening experience that involves witnessing gruesome acts of violence. War is fundamentally a contest of wills fought by men, not machines. War is characterized by torture and killing of own species. According to Freud civilized man's need to express his destructive nature results in periodic outburst of conflict and war.

The fateful question for the human species seems to me to be whether and to what extent their cultural development will succeed in mastering the disturbance in their communal life by the human instinct of aggression and self-destruction. It may be that in this respect precisely the present time deserves a special interest. Men have gained control over the forces of nature to such an extent that with their help they would have no difficulty in exterminating one another to the last man. (Civilization and its Discontents by Sigmund Freud, 1930)

There are currently on average at least 50 armed conflicts active in the developing world in any one year (UNICEF 1986). When conflict so routinely involves the destruction of whole communities, even survivors of individual acts of brutality are likely to register their wounds as social rather than psychological. (The Impact of War and Atrocity on Civil Populations- Derek Summerfield) Experiences of war and atrocity are so extreme that they do not just cause suffering on a large scale, they cause traumatization.

Combat Trauma

Psychological Trauma is defined by the American Psychiatric Association as an event or events that involved actual or threatened death or serious injury, or to a threat to the physical integrity of self or others. Examples include military combat, violent personal attacks, natural or man made disasters and torture. (DSM 4 p.424)

Combat trauma is a horrendous experience. During a trauma soldiers often become overwhelmed with fear. Soon after the traumatic experience they may re-experience the trauma mentally and physically. Because this can be uncomfortable and sometimes painful, they tend to avoid the reminders of the trauma.

In the Northern conflict many soldiers underwent traumatic battle events beyond the usual human experience. There was the regular stress of seeing fellow soldiers being killed or wounded and sight of unburied decomposing bodies, of hearing unheeded screams for help from the wounded, and of helplessly watching the wounded die without the possibility of being rescued. No doubt these events have caused immense trauma among the combatants.

Combat Related PTSD

The circumstance of war can produce a range of emotional, psychological and behavioral stress reactions among soldiers and officers that can lead to a condition known as PTSD (Post Traumatic Stress Disorder) The symptoms of PTSD were described in the context of war related trauma. PTSD is described in the DSM-4 as the development of characteristic symptoms following exposure to an extreme traumatic stressor. PTSD marked by symptoms of re-experiencing, avoidance and arousal was officially delineated in 1980 as a clinical diagnosis within the category of anxiety disorders.

In military personnel exposure to traumatic stressors is part of the expected work experience. Situations that cause PTSD are often so severe that alter one's view of life. This is true of combat. There is ample evidence from research with war zone veterans indicating that the greatest risk factor for the later development of PTSD is the magnitude of exposure to the trauma it self. According to Dr. Terry Keane who reviewed the epidemiological studies on PTSD(1990)estimates that 15.2%of all male and 8.5% of all female Vietnam theater veterans currently suffer from PTSD- approximately 450,000 veterans in all.

Conditional Risk of PTSD

The estimated risk for developing PTSD for people who have experienced the following traumatic event is:

Witness killing	7.3%
Facing a gun shot injury	15.4%
Severe beating or physical assault	31.9%
POW	53.8%

PTSD Symptoms

Typical symptoms include episodes of repeated reliving of the trauma in intrusive memories (flashbacks) or dreams occurring against the persisting background of a sense of numbness and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia and avoidance of activities and situations reminiscent of the trauma.

The combatants with PTSD have the classic symptoms of sleep disturbance, psychomotor retardation, feeling of worthlessness, difficulty in concentrating etc. Due to circumstance of war extended grieving on the battlefield is very unproductive and could become a liability.

Accompanying the depression is a very well developed sense of helplessness about one's condition. Many veterans report becoming extremely isolated when they are especially depressed. Substance abuse is often exaggerated during depressive periods.

Psychological Assessment and PTSD

PTSD is a multifaceted disorder with a number of associated features, including guilt, anger, depression, substance abuse and other anxiety disorders. A careful psychological assessment needs to determine the presence and severity of the range of adverse reactions to trauma. It's clear that assessment of war zone PTSD is longer than assessment of other trauma syndromes. Semi-structured interviews such as the Structured Clinical Interview for DSM-3-R, the Clinician Administered PTSD Scale and the Structured Interview for PTSD, can help establish the presence and severity of disorder PTSD as well as psychometrically sound questionnaires with established norms such as the Mississippi Scale for Combat –related PTSD, The Impact of Event Scale, the Veronen- Kilpatrick Modified Fear Survey.

PTSD Check List Code Name Palaly (developed by Dr. Neil Fernando/ Dr Ruwan M. Jayatunge) has been used to assess combat related PTSD in Sri Lanka. PCL Palaly is based on DSM-4.⁴

Psychological Assessment can provide valuable information to clinicians regarding trauma exposure, PTSD symptoms and associated features, and treatment process and outcome.

Combat exposure

PTSD could arise in the context of an event outside the range of usual human experience. It cannot occur without exposure to a traumatic event of sufficient magnitude. Combat exposure can be divided in to several intensities.

Grade A exposure- In grade A exposure combatants have experienced heavy combat, sustained grievous injuries and felt fear and despair.

Grade B exposure- In grade B exposure the subject had sustained non-grievous injuries, but exposed to heavy combat, witnessed death of the other soldiers, felt fear and helplessness.

Grade C exposure- In grade C exposure the subject was exposed to heavy combat without any injuries, witnessed death of the fellow soldiers and distortions. Fear, helplessness and guilt may be evident during the trauma.

Grade D exposure- Not exposed to active combat but seen the dead soldiers and the wounded. The initial reaction would be anger towards the enemy and nostalgia.

Grade E exposure – Not exposed to active combat or witnessed devastating combat events, but underwent threatened situations, felt uneasy and fear of being attacked by the enemy.⁵

Post combat reactions

We have identified a number of post combat reactions among the soldiers who were exposed to the battle. The combat soldiers can manifest a vast range of post combat reactions. These stress reactions can be classified in to several groups.

- 1) Post Combat Reaction -Depressive Type
- 2) Post Combat Reaction -Dissociative Type
- 3) Post Combat Reaction -Somatic Type
- 4) Post Combat Reaction -Psychotic Type
- 5) Post Combat Reaction- Perverse Type

Post Combat Reaction Depressive Type

Depression is an affective disorder leading to persistent feelings of worthlessness, hopelessness, guilt, agitation and indecisiveness. Depression can dramatically impair a soldier's ability to function in the combat zone. Combatants with depression often have feelings of despair, hopelessness, and worthlessness as well as thoughts of committing suicide. Depressive factors in combat were evident to Dr. Mendez Da Costa of the American Civil War to Dr. Fredric Mott who coined the shell shock term during WW1.

Combat can challenge a person's moral judgment. Killing is not that much easy for many soldiers. To put a bullet through another man's heart or head can cause psychological repercussions in later years. Overall view of the battle field might look depressive to most of the combatants. Scattered dead bodies, damaged houses and vehicles, destroyed vegetation always give a gloomy look.

Lance Corporal SU (32Y) was diagnosed as having depression in May 2000. His depressive symptoms started in 1992 after witnessing a land mine explosion. Even though he managed to escape without a single injury, he saw how his friend died in the blast. His depressive features appeared as survival guilt, self blame, hopelessness, grief and bereavement.

Private T has served seven years in the operational areas. On one occasion his best friend died of a sniper attack. After the conformation of death private T was ordered to bury the body. When he wrapped the friend's dead body he could feel the body warmth. This warmth may have been caused by the hot Northern climate. But Private T was shattered. After some years he had an irrational feeling that he buried the man alive. He manifested guilty feelings, anhedonia, insomnia, cognitive impairments, reduced life interests and was later diagnosed with Depressive Disorder.

De Fazio, Rustin and Diamond (1975) and Helzer Robins and David(1976) all found a higher rate of mild to severe depression and anxiety in Vietnam veterans from five years after discharge. Davis (1976) found a higher incidence of depression in veterans who had been in combat and had lost a friend.

Post Combat Reaction -Dissociative Type

Dissociation is a mental process, which produces a lack of connection in a person's thoughts, memories, feelings, actions or sense of identity. Dissociation can be interpreted as a protective or defensive reaction in extreme stress. Soldiers may use their natural ability to dissociate to avoid conscious awareness of a traumatic experience while the trauma is occurring and for an indefinite time following it.

Disturbances of physical function are a characteristic feature during combat and even after combat period. Disruption of motor sensory and speech functions can be noticed. The affected soldiers have manifested following symptoms.

- 1) Weakness or paralysis of hands, limbs or body
- 2) Gross tremors
- 3) Pseudo Convulsive seizures
- 4) Hysterical blindness
- 5) Hysterical deafness
- 6) Psychogenic aphonia
- 7) Loss of sensation
- 8) Abnormal sensation(parasthesia)

Lance Corporal A has served 17 years in the military predominantly in the combat zone. On one occasion he went in to dissociative fugue and walked in the enemy lines. Later he was saved by a friendly group of soldiers. Lance corporal A was referred to the Psychological Unit of the Military Hospital Colombo with psychogenic aphonia and diagnosed as having dissociative disorder.

Post Combat Reaction Somatic Type

Long term impact of combat on physical illness is an evident factor since the American Civil War. Stress can have a direct effect on physical symptoms. Acute and chronic combat reactions frequently manifest as somatic symptoms including fatigue, palpitation, headaches, joint pains, tremors, impotence and numbness. According to Freud anxiety can be presented in somatic channels.

L/Cpl S has served 9 years in the operational areas without any physical injuries. He witnessed a number of traumatic battle events. At Welioya he saw a claymore mine explosion and death of 4 soldiers. In 1997 he had a narrow escape when the enemy fired a RPG to his bunker. By 2003 L/Cpl S was presented with a long lasting backache,

headache, chest discomfort, tremors which had no apparent medical basis. He was later diagnosed with Somatoform Disorder.

Post Combat Reaction -Psychotic Type

Combat stress can aggravate hidden psychotic factors. Many combatants have manifested psychotic reactions soon after the traumatic combat events. Temporary or transient mental disorders may develop even in previously stable personalities after exposure to battle stress.

Cpl W (38Y) was a competent soldier from the Special Forces. In 1990 he sustained a gun shot injury to the chest at the Jaffna Fort. After he became wounded his mental condition changed gradually. He had passivity feelings, thought broadcasting, flatness of affect, social withdrawal, auditory hallucinations and ideas of grandeur. He was referred to the Psychiatric Unit -Teaching Hospital Peradeniya and treated for Schizophrenia.

Post Combat Reaction Perverse Type

Some combatants develop abnormal or sexually inclined reactions after facing combat stress. These reactions can be sadistic or masochistic in nature. Although there is no extensive research on sexual deviant behaviors among the Sri Lankan combatants, we have treated a small number of soldiers with Voyeurism, Exhibitionism, Zoophilia, and Hypoxyphilia.

Panic Attacks in the battle field

During the enemy attacks some soldiers have gone in to acute stress reactions and some have developed Panic Attacks. Panic is defined as acute fear followed by flight behavior tends to occur under fairly specific conditions.

Lt. B witnessed the instant death of seven soldiers following an incoming mortar. He went in to panic attack and later developed full blown symptoms of PTSD.

Misconduct Stress Behaviors among the Combatants

Combat can produce two types of behavior, one adaptive and other dysfunctional. Elements leading to dysfunctional behavior are criminal acts, which includes abusive behavior, social disruption, domestic violence, alcohol abuse, substance abuse, desertion etc. Non battle injury rates, disciplinary infractions, brutality, drug and alcohol abuse and AWOL are the indications of potential misconduct stress behavior.

Year

No of Desertions in the Army

2000	4972
2001	6018
2002	7326
2003	4373 (in the first three months)

Total Number of AWOL in the Army 34802 (Until 11th of Nov 2005)

Suicide and Deliberate Self Harm

A number of soldiers have committed suicide in the battle field. In addition a considerable amount of uncompleted suicides have been recorded. Suicide is a complex event. There are biological, psychological and sociological causes of suicide and suicidal behavior. Among the 824 combatants 22 of them had lethal suicidal attempts during 2002 Aug – 2005 March. Among the methods used were self poisoning, shooting, hanging and in one case planned road traffic accident.

Alcohol and Substance Abuse

Alcohol and substance abuse can be interpreted as a negative stress coping action. For drugs to be attractive to a soldier there must be some underling unhappiness, sense of hopelessness or physical pain. In our study we found cannabis was the major substance that was abused. Three soldiers were found to be abusing heroin. Alcohol is often abused to self medicate anxiety, depression, irritability and sleep disorders.

Number of combatants interviewed	824
Combatants with Chronic alcoholism and substance abuse	29

Malingering in the battle field

Malingering is an offence under the Sri Lankan military law. Malingering in the battle field is not a rare phenomenon. Malingerers are those few soldiers who in an effort to avoid duty, deliberately and willfully fake illnesses, physical disablement, mental lapses or derangement including battle fatigue. These symptoms are under voluntary control. Malingering can be dealt with by good military leadership, trust in command and favorable counseling

Private S was an absentee who was arrested by the Military Police. He constantly complained of fitting attacks. This seizure condition had no apparent medical or psychological basis. With rapport and good communication and also support by his own unit Private S was given assurance and trust in command. Today he is doing a productive service to the Army.

Post Combat Syndrome (PCS)

As Shalton (1978) indicates there are several common responses showed by soldiers those who have PCS.

- 1) Guilty feelings and self punishment
- 2) Feelings of being a scapegoat
- 3) Rage
- 4) Hyper-arousal
- 5) Loss of sensitivity and compassion
- 6) Alienation of their feelings
- 7) Substance abuse
- 8) Feelings of worthlessness
- 9) Self harm
- 10) Mistrust and doubts of love towards others
- 11) Difficulty in concentrating

Residual psychological damage and lowering of tolerance to stress of any kind is an evident factor in PCS. Many have impaired sexual potency, low frustration tolerance and maladaptive psychological reactions.

Sergeant SU has been serving 17 years in the Military. He lost his leg as a result of an antipersonnel mine. After he became injured Sergeant SU started alienating his feelings. He has guilt and suspicion. He was hospitalized several times for deliberate self harm. He is addicted to cannabis. Often he becomes aggressive and has violent impulses against indiscriminate targets.

Adjustment difficulties to the Civil Life

Many ex-servicemen face post combat readjustment problems. They find it difficult to readjust to the civil life after serving a long time in the military. A number of psychological factors may contribute to the overall stress load experienced by the ex-servicemen. They are a vulnerable group both medically and psychologically.

Capt K retired from the army after serving 20 years. During his military career he was exposed to heavy combat and sustained minor injuries. After the retirement he found it difficult to adjust him self in the civil setup. Capt K felt a misfit in the civil society and was always uneasy. Although he did several jobs after the retirement he found it difficult to work with civilians.

Delayed Reactions

Combat stress has residual effect on some veterans. For some soldiers, conscious thoughts and feelings or memories about the over whelming traumatic circumstances may emerge at a later date. According to Dr. Michael Robertson of the Mayo Wesley clinic ex-servicemen can experience delayed reactions of combat stress. A large number of WW2 Veterans those who never had any anxiety related symptoms later complained of Delayed PTSD. Some reactions were manifested 40-50 years after the original trauma.

Sergeant K has served 18 years in the Army. During 1988-89 JVP uprising he was exposed to numerous traumatic events. On one occasion he had to kill a rebel and set him on fire. The victim made an unsuccessful attempt to grab the sergeant while his entire body was in flames. Sergeant K became frightened and shocked. In 2003 his wife accidentally dropped the kerosene lamp and her clothes were on fire. Sergeant K became shocked when he saw his wife struggling to extinguish the fire. Fortunately his wife did not sustain severe burn injuries. But Sergeant K had intrusions and flashbacks of the 1988 original event. He was later diagnosed with PTSD. This case example could have been interpreted as a delayed reaction of PTSD.

Peacekeeping Forces and Combat Stress

In 2004 a Sri Lankan contingent of military personnel was sent to Haiti as a UN Peace Keeping Force. Dag Hammarskjold , the late Secretary General of the United Nations is often quoted as having said that peacekeeping is not a job for soldiers, but that only soldiers can do peacekeeping.

The duties of peacekeepers are strictly to observe, monitor, and report. Although the peacekeepers do not directly engage in active combat they can be at risk both physically and psychologically. Witnessing atrocities and being subjected to firing incidents without permission to return fire, facing uncertain events can lead to psychological harm. Therefore peacekeepers need screening and further psychological support once they come home.

Sergeant N served in Haiti as a peace keeper in 2004. After he returned from Haiti Sergeant N experienced stress related physical symptoms, anxiety with depressive features, fatigability, and unpleasant intrusions. Later he was diagnosed with Adjustment Disorder.

War Widows

There are estimated 4,000 War Widows from the Tri Forces. They still experience grief reactions. With the death of their husbands these women have become a psychologically and socially vulnerable group. Many widows who underwent severe emotional pain still have not recovered completely.

According to Homes and Rahie Stress Scale the loss of a family member carries the highest stress level. In the psychological context a traumatic experience like sudden death of a relative which is an abnormal reaction can cause long lasting negative effects.

There are various socio-economic difficulties faced by the widows. According to the Sri Lankan culture the name widow denotes some form of socio-cultural stigma and humiliation. They are considered a bad omen in the rural areas. This factor directly affects their self esteem. In some cases they are accused by the deceased's in-laws that because their unluckiness they lost their husbands. In addition many widows undergo sexual harassment.

Many of the widows carry the psychological scars of the memories of their husbands. Some have pathological grief reactions.

Number of war widows interviewed	86
Diagnosed with depression	23
Past suicidal attempts (after the husband's death)	10

(Depression was diagnosed by Beck's scale)

Psychological Management of Combat Stress

Stressors are unavoidable factors in a battle. Controlling combat stress is often a decisive factor in victory. Military Psychologists unanimously agree that treatment of combat stress should begin as soon as possible. There are several modes of counseling and psychological therapies that have been used to treat combat stress in Sri Lanka.

Role of Cognitive Behavior Therapy

The goal of CBT is to guide the person's thoughts in a more rational direction and help the person stop avoiding situations that once caused anxiety. It teaches people to react differently to the situations that trigger their anxiety symptoms. Therapy may include systematic desensitization or real life exposure to the fired situation.

Client Centered Therapy

Client Centered Therapy was widely used in the combat zone. By retelling the traumatic event to a calm, empathic, compassionate and non judgmental therapist the survivor achieves a greater sense of self esteem, develops effective ways of thinking, coping and more successfully deals with the intense emotions that emerge during therapy. However in extreme trauma Client Centered Therapy was found to be not effective.

CISD (Critical Incident Stress Debriefing)

Debriefings take place on the battlefield as soon as possible after the action. Colonel S.L.A. Marshall of the US Army developed the method of conducting interviews with the surviving members of small units in the field soon after the battles. Marshall regarded this finding as one of his two most important contributions to the Army.

Several factors affect an individual's response to a critical incident. Advance warning allows the person time to develop coping strategies. The more intimate the person's role, involvement, and proximity to the event, the more potential impact. The severity of the event and any loss are also contributing issues. Currently there is controversy regarding CISD. Some forms of debriefing may actually make people worse (Mayou & Ehlers, 2000)⁶, while other types of treatment have demonstrated good success in helping people to get through a trauma.

Rational Emotive Therapy

American Psychologist Albert Ellis comes to regard irrational beliefs and illogical thinking as the major cause of most emotional disturbances. In his view negative events do not by themselves cause depression or anxiety. Rather emotional disorders result when a person perceives the event in an irrational way. So despite the client's irrational beliefs and long-lasting assumptions the rational emotive behavior therapists often use confrontation techniques.

Most of the soldiers suffering from combat related stress have unresolved grief, survival guilt and irrational beliefs which lead to depression and anxiety. Rational Emotive Therapy can be used to break their illogical thinking pattern through friendly mediation.

Exposure Therapy

Exposure Therapy is one form of cognitive behavior therapy unique to trauma. Treatment which uses careful repeated, detailed imaging of the trauma (exposure) in a safe controlled context, to help the survivor face and gain control of fear and distress that was overwhelming in the trauma. Intrusive thoughts, flashbacks, avoidances are best treated by exposure therapy.

Trauma Focus Group Therapy

Trauma focus therapy groups are typically smaller and more structured involving 5-10 patients. Group composition is controlled in some treatment settings with patients

grouped according to the type of trauma they experienced. Traumatic memories are actively re-engaged and patients openly discuss traumatic experiences with a co-facilitator.

Anger Management

Anger and rage are widespread emotions in individuals experiencing combat trauma. Combat veterans experience more anger and hostility than their civilian counterparts. Treatment of anger component is a necessary ingredient in trauma recuperation work. In anger management combatants learn constructive ways to manage their anger.

Delete Method

Delete Method is based on Gestalt Psychotherapy and Progressive Relation Therapy. Gestalt psychotherapy was based on the belief that the whole is greater than the some of their parts. Frederick Perls who developed Gestalt therapy refused to dwell on the past like traditional Freudians. Perls say that patients can not blame who they really are on the past traumas as psychoanalysts permit, because the past no longer exists. This experience is totally applicable to combat related PTSD. Gestalt therapy aims at making a person more integrated or psychologically whole. In PTSD this integration breaks. PTSD victims do live in their past traumatic experiences. Gestalt therapy provides for them to release their pent up feelings, increase their self awareness and open their blocked potential for growth.

Combination of Gestalt therapy and Progressive Relaxation Therapy (PRT) help to annihilate the unpleasant disturbing memories. Pierre Janet was a Neurologist who discovered that traumatic memories which the patient had forgotten could be recovered during hypnosis. In PRT the therapist reverses the process. War related traumatic memories can be pushed to the unconscious reducing anxiety, intrusions and flashbacks. Embedding the traumatic memories to the unconscious is done in two levels (conscious level-by using Gestalt therapy/ unconscious level –by PRT) to avoid traumatic neurosis.

Most occasions in combat trauma psychological symptoms appear due to acquisition of anxiety response. Delete method helps the patients to detach themselves from the traumatic combat memories.⁷

Psycho analytic Psychotherapy

Psychoanalytic Psychotherapy has been used during WW1. Some of Freud's patients like the soldier of Darden Hill and the officer Norman White were successfully treated with Psychoanalysis. Some of the Sri Lankan combatants who have developed dissociative phenomena were treated with Psychoanalytic therapies.

Existential Therapy

Existential Therapy focuses on free will, responsibility for choices and search for meaning and purpose through suffering, love and work. Existential psychotherapy deals with basic issues of existence that may be present within a person. The Existential Therapy avoid restrictive models that categories or labels people. Instead they look for the universals that can be observed trans-culturally. Existential psychotherapy aims at enabling clients to find constructive ways of coming to terms with the challenges of everyday living.

Family and Marital Therapy

Many combatants with combat related stress have disrupted family relations, Spouse abuse, cruelty to children and sexual dysfunctions are evident among the affected personnel. Emotional numbing and constricted affect associated with PTSD interferes with successful marital relationships and parenting.

In family and marital therapy the therapist applies therapeutic principles while engaging the participation of family members. Constructive aspects of the family's relationships are reinforced, while destructive elements are identified and altered. Family members are taught better communication skills and ways of positive coping.

EMDR (Repossessing Therapy)

EMDR (Eye Movement Desensitization and Reprocessing) is one of the most researched methods of psychotherapy used in the treatment of trauma. EMDR is an information processing therapy and uses an eight phase approach.⁸ EMDR facilitates the accessing of the traumatic memory network, so that information processing is enhanced, with new associations forged between the traumatic memory and more adaptive memories or information. These new associations are thought to result in complete information processing, new learning, elimination of emotional distress and development of cognitive insights. EMDR has been given the same status as CBT as an effective treatment for ameliorating symptoms of both acute and chronic PTSD (American Psychiatric Association -2004). In treating Sri Lankan combatants EMDR has answered most of the practical questions. In addition remarkable success has been achieved by the affected combatants through EMDR. EMDR has been recommended as one of the principal methods of trauma management in the Sri Lanka Army.

Psychosocial interventions

The term psychosocial underlines the close relationship between the psychological and social effects of armed conflict, the one type of effect continually influencing the other. The umbrella of psychosocial has been applied to programs that seek to promote human rights and justice. Equally the term has been embraced by those initiatives with a community developmental focus. Counseling has been suggested as a key intervention by many who argue that such intervention can support adjustment (Agger, 1997).

Psychosocial Strategies

1. Provision of explicitly psychologically or medically services
2. Awareness raising and psycho education
3. Interpersonal skills development for community members
4. Social activities to support the expression of feelings and thoughts
5. Mobilization of existing social networks in the community
6. Skills training to improve material security and sense of self efficacy
7. Strengthening of spiritual dimension

Conclusions

This study provides an initial look at the mental health of members of the Army who were involved in combat operations. There was a strong reported relation between combat experiences, such as being shot at, handling dead bodies, knowing someone who was killed, or killing the enemy, and the prevalence of PTSD. Findings indicate that among the study groups there was a significant risk of mental health problems especially regarding combat related PTSD. Longitudinal study of the effect of combat on the mental health of the soldiers reveals that the systematic treatment and close monitoring is needed following the possibility of late reactions urge screening and treating the combat stress during war time and in times of peace as well.

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Combat Related PTSD among Sri Lankan Combatants and Psychological Management
Dr Ruwan M Jayatunge

Abstract

Objective: To study the impact of combat related stress and psychological management of combatants

Design: Assessment of Military Hospital Psychiatric Unit attendees using a structured questionnaire.

Materials & Methods: Soldiers coming for treatment at the Psychiatric Unit Military Hospital Colombo in August 2002 to March 2005 were chosen to be studied. The study groups included 824 soldiers and obtained informed consent and the methods used ensured participants' anonymity. The study was conducted under the direct supervision of the Consultant Psychiatrist of the Sri Lanka Army. These Soldiers were administered the PTSD Check List based on DSM 4 with a structured interview. This schedule designed from similar trauma questionnaires used elsewhere in the world to detect PTSD. (one or more re-experiencing symptoms; three or more avoidance/numbing symptoms; two or more hyper-arousal symptoms) and that they coexist for at least 1 month after the trauma and are associated with significant distress or functional impairment)The presence or absence of PTSD was evaluated with the use of the PTSD Checklist. Results were scored as positive if subjects reported at least one intrusion symptom, three avoidance symptoms, and two hyperarousal symptoms that were categorized as at the moderate level, according to the PTSD checklist. In addition to these measures, on the survey participants were asked whether they were currently experiencing stress, emotional problems, problems related to the use of alcohol, or family problems.

Results Exposure to combat was significantly greater among those who were deployed in the North and East of Sri Lanka. The percentage of study subjects whose responses met the screening criteria for major depression, generalized anxiety, or PTSD was significantly higher after serving in the above mentioned areas. PTSD was identified in 62 combatants (56 with full blown symptoms and 6 with partial PTSD)

Conclusions: This study provides an initial look at the mental health of members of the Army who were involved in combat operations. There was a strong reported relation between combat experiences, such as being shot at, handling dead bodies, knowing someone who was killed, or killing the enemy, and the prevalence of PTSD. Findings indicate that among the study groups there was a significant risk of mental health problems especially regarding combat related PTSD. Longitudinal study of the effect of combat on the mental health of the soldiers reveals that the systematic treatment and close monitoring is needed following the possibility of late reactions urge screening and treating the combat stress during war time and in times of peace as well.

