Professor C.Sivagnanasundram Oration 2013

Prof. C. Sivagnanasundram

By:

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Message from the President, Jaffna Medical Association

It is my privilege to extend my warm welcome to the guests to this memorial oration of our beloved Professor Late. C. Sivagnanasundram.

Prof. C. Sivagnanasundram was a distinguished person. His contribution to the health services, research works and medical education were immense. He was a world recognized medical professional and a literary person.

The memorial oration is being delivered by Prof. Daya Somasundaram. He is a well-known teacher for most of us. He was a consultant Psychiatrist and Senior Lecturer of Psychiatry in Faculty of Medicine, University of Jaffna over a decade. Later he became a Senior Professor of Psychiatry in University of Jaffna.

He is a world recognized medical professional and his services to Northern part of Sri Lanka is immense. His records and publications are mainly concentrated on psychological effects and treatment of disasters. He co-authored the book "Broken Palmyrah". His book "Scarred Mind" describes the psychological effects of war on individuals. He was a commonwealth scholar in 1988-1989 and Fellow of the Institute of International Education's Scholars Rescue fund, New York, USA. In 2006-2008, he is a fellow of Royal College of Psychiatrists UK, Royal Australian and New Zealand College of Psychiatrists and Sri Lanka College of Psychiatrists. He is currently on extended sabbatical in Australia working on book "Scarred Communities" while working as Consultant Psychiatrist at Glenside hospital Supporting Survivors of Torture and Trauma (STTARS) and clinical associate Professor of University Adelaide. He has previously delivered the Sivapathasundaram 3rd memorial lecture on "Child Trauma" 1n 1993.

Prof. S. Vithyananthan memorial lecture on "Man is search of his soul" (Tamil) in 1994, Prof. K. Balasubramanium gold medal lecture on "Collective trauma" in 2002 and the Sri Lanka College of Psychiatrists oration for 2013 on "Addressing Collective Trauma'' in the Sri Lanka Center.

Today his topic is on "Psychological Rehabilitation in post war context- Northern Sri Lanka -2013 and beyond to be delivered at the "Annual Scientific Sessions 2013" of the Jaffna Medical Association with the theme of "Achieving health through rehabilitation and human rights".

Thank you

Dr. S. Uthayakumar
The President
Jaffna Medical Association

Psychosocial Rehabilitation in a post-war context

-Northern Sri Lanka in 2013 and beyond

Daya Somasundaram

முழங்கிய யுத்தம் முழுதாய் முடித்துப்
பழங்கதையாய்த் தானும் முடியக் - கிழவர்
முதல்நற் குழந்தை வரைகிடந்தோம் நெஞ்சில்
சிதற்பட்ட வாழ்வை நினைந்து.

உடம்பினில் காயமில்லை உள்ளதும் மாறி
தடமும் மறைந்துபோச்சு சொந்த இடத்தினில்
வந்துநாம் குந்தியும் விட்டோம் எனினுமேனோ
வந்த தெமக்கோர் இளைப்பு.

வெறுப்பும் விரக்தியும் வேதனைஎண் ணத்தின்
வறுப்பும் மிகுந்திட நெஞ்சம் இறுகிக்
கனமாய் இருக்கத் தலையும் விறைக்க
மனம்முய லும்தற் கொலைக்கு.

எவரு(ம்)உற்றார் போர்வடுத் தான்....

இதனால் பிறரொடு சொல்லு(ம்)ஆறு தல்போய்
அதனால் மனதுள் உலைமெழுகாம் துன்பம்
உறைவிடம் கொள்ள நடைப்பிணமாய் நாங்கள்
அறையில் கிடந்தோம் உடைந்து.

வருபவர் எல்லாம் பொருள்களும் காசும்
இருப்பின் நிழலும் தருவதில் நின்றார்.
இருப்பினும் எம்மிலவை தந்ததில்லை தென்பை
இருண்மையில் வாழும் மனது.

பிரளயம் தாக்கிப் பிழைபட்ட செல்வம்
கரவலு ஒன்றால் கடிதில் பெறலாம்
வறுமையில் நிற்பினும் செம்மையாய் வாழ்வோம்
சிறுமைசெய் உள்ளமுயர்ந் தால்.

நெஞ்சுக்கு நிம்மதி தந்திடும் மார்க்கமே
அஞ்சலில் கெஞ்சலில் துஞ்சலில் நின்றெமை
மீளக் கொணரும் உரத்தைக் கொடுத்துநல்
ஆளாக் கு(ம்)அரு மருந்து.

- from **மாற்(று)எம் பிரளயத் தீர்ப்பு** (N. Navaraj, 2013)

Introduction

Rehabilitation usually means reversing the debilitating effects of an injury. Injury would encompass physical, psychological and social trauma. A simple definition of medical rehabilitation was given by the renowned Scottish medical specialist Professor Alexander Mair in the Mair report (1972), "*the restoration of an individual to his fullest physical, mental and social capabilities*". The Report of the WHO Expert Committee on Disability Prevention and Rehabilitation (1981) broadens the concept to include the social dimension: "*community-based rehabilitation involves measures taken at the community level to use and build on the resources of the community, including the impaired, disabled and handicapped persons themselves, their families and their community as a whole*," and also highlights the active role that communities should play by being consulted and participating in the needs assessment, planning and implementation stages.

The full scope of the theme of the JMA 2013 sessions, "***Achieving Health through Rehabilitation and Human Rights***" can be understood using the WHO definition of health:

"*Health is a state of complete physical, mental, (familial)*[1]*, social, (cultural), (spiritual) and (ecological) well-being, and not merely an absence of disease or infirmity*".

- World Health Organization (WHO, 1948)[2]

The aim of rehabilitation would be restore health and wellbeing that has been lost or injured by the war and earlier, by the tsunami. The family unit (in parenthesis for author additions) has been included in the above definition as it is paramount in traditional Tamil society while the spiritual dimension is an essential part of the Tamil culture. The spiritual dimension has been put forward at various WHO fora but has not been formally accepted yet. Culture is increasingly recognized as an important dimension of mental health (Bhugra and Bhui 2007). The ecological dimension arises from Bronfenbrenner's (1979) and environmental models and systems theory that emphasis an overall holistic approach, looking at how the different levels, dimensions and systems with different temporal trajectories of their own; influence each other to produce an interactive, dynamic (dys)functional whole. Though the WHO definition of wellbeing artificially divides into the physical, mental and social dimensions for the sake of elucidation, they are in reality interdependent and interconnected systems. When one dimension is adversely affected it causes disturbances at all the other levels also. Table 1 provides an expanded interpretation of health, with examples of causes, symptoms, diagnoses and interventions for illnesses or disorders.

Thus a physical illness will have physical causes, physical symptoms and physical treatment. But it could also have in addition, or associated psychological, social and spiritual causes, symptoms and treatment. Many physical diseases are caused or exacerbated by psychosocial factors. Apart from well-known psychosomatic diseases like Bronchial Asthma, Peptic Ulcer, Hypertension and Eczema, the list of physical illnesses that are linked to stress is growing rapidly. From aggravating or exacerbating common conditions like Coronary heart disease,

[1] The words within parenthesis are author's additions the reasons for which are explained in the text

[2] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June 1946, and entered into force on 7 April 1948.

Rheumatoid Arthritis, Diabetes, Migraine, Fibromyalgia, Chronic Fatique Syndrome, Ulcerative Colitis and Irritable Bowel Syndrome (Lefton and Valvatne 1985), current research on stress related conditions has found that by lowering immunity, stress can lead to an increase susceptibility to infections and even cancer (Andersen, Kiecolt-Glaser et al. 1994, Cooper 2005)(Table 2). The growing field of psychoimmunology studies the effects of stress on the immunological system. It is noteworthy that several III MBBS research projects done under the supervision of late Prof. Sivagnanasundram demonstrated the beneficial effects of cultural relaxation practice, in our case, yoga, on some of these stress related conditions (Puvaneanthiranathan 1994, Ketheswaranathan and Koneswary 1995).

Similarly, physical diseases, in addition to the familiar somatic signs & symptoms, also manifest with psychological, social and spiritual symptomatology. It is understandable that a person with a chronic arthritis or incurable cancer will have sadness, hopelessness and resentment. They may go on to develop frank Reactive Depression. Spiritually, they may lose faith or contrariwise may develop added faith in their religion. It is now well established that a person with chronic physical illnesses are benefited from psychological forms of treatment such as counselling and relaxation exercises. Spiritual solace may be also helpful.

Table 1 Dimensions of Health- Some examples of ill health

Dimensions of Health	Causes	Symptoms	Diagnosis	Interventions
Physical	physical injury infections, nutritional deficiencies, excesses	pain, fever, disability, somatization	Physical illness, Psychosomatic, Somatoform disorders	Health education, drugs treatment, physiotherapy, relaxation techniques, massage
Psychological	shock stress fear- terror loss trauma	tension, fear, sadness, learned helplessness	ASR, PTSD, Anxiety, Depression, Alcohol & Drug abuse	Psychoeducation, psychological first aid, psychotherapy, counselling, relaxation techniques, CBT, testimonial therapy
Family	death, disappearance, separation disability poverty	role vacuum disharmony, negative dynamics, violence scapegoating	Family Pathology	Psychoeducation, family therapy, marital therapy family support, family unity, cohesion, mutual understanding, relationships
Social	unemployment, displacement, Gender Based Violence, unwanted pregnancies, poverty, war, “repressive ecology”, genocide	conflict, suicidal ideation, anomie, alienation, withdrawal, loss of communality, substance abuse, empty rituals	Parasuicide, Suicide, Violence, collective trauma	Psychosocial education, group therapy, *testimonio*, trust, rehabilitation, community mobilization, participatory methods, empowerment, social engineering, social cohesion, building social capital, collective efficacy
Cultural	racism, colonization, majoritarianism, cultural genocide, assimilation, domination, culture shock, acculturation stress	depression, suicide anger, violence helplessness, despair demoralisation, crime,	Fractured communities Drugs and alcohol Suicide, Cultural Bereavement, DV, Violence	strengthening communities cultural traditions, practices, healing rituals, ceremonies, traditional healers, elders, narrative therapy, recognition of the culture.
Spiritual	misfortune, bad period, spirits, angry gods, evil spells, karma	despair, demoralization, loss of belief, loss of hope	Possession , Dissociation	logotherapy, rituals, traditional healing, meditation, contemplation, mindfulness, middle way, harmony
Ecological	disasters, pollution, climate change, loss of biodiversity, exploitation of resources, deforestation	epidemics, pandemics, malnutrition, starvation, stress, conflict, migration, loss of communality	Pandemics, Disaster syndromes, ecocide	sustainable development, conservation, renewable energy, environmental protection, holistic & integrative methods, equilibrium, homeostasis

Table 2 Various Stress – Related Disease and Conditions
(Modified from Lefton & Valvatne (1985))

System affected	Resulting condition
Cardiovascular system	Coronary artery disease, Hypertension Cerebro Vascular Accident (CVA), Heart Rate Variability (HRV) and Rhythm disturbances
Respiratory and allergic disorders	Bronchial Asthma, Hay fever
Gastrointestinal disturbances	Peptic Ulcer, Irritable bowel syndrome (IBS) Diarrhoea, Nausea and vomiting Ulcerative colitis, Anorexia Nervosa, Bulimia
Muscular system	Tension headaches, backache, neck pain
Locomotor system	Rheumatoid arthritis, Ligamentous and connective tissue disorders, SLE
Genito-urinary disturbances	Diuresis, Erectile dysfunction, Orgasmic dysfunction Dhat syndrome, frigidity, vaginismus, Pre-Menstrual Syndrome (PMS)
Dermatological disease	Eczema, Neurodermatitis, Acne, SLE
Immunological disorders	Lowered resistance to infections, Autoimmune disease, Cancer
Other problems	Diabetes Mellitus, Chronic Fatigue Syndrome

In the same way, mental illnesses may have physical, social and spiritual causes, symptoms and treatment. Mental illnesses with physical symptoms are the common Somatoform Disorders or Somatization. Worldwide it has been established that from a quarter up to a third of patients seeking help at primary health care facilities, that is Out Patient Departments (OPD), General Practice, traditional and other health centres may be suffering from different types of psychological disorders (Samarasinghe, 1991; Goldberg & Blackwell, 1970; Nikapota, Patrick & Fernando, 1981; Bridges & Goldberg, 1987; Kirmayer, 1996). A further proportion may be having various psychosocial problems manifesting through physical symptoms. All these patients usually present with physical symptoms that on examination and investigation turn out not to have an organic basis; or, are not explainable by any organic condition that is present. There may be coexistent anxiety, depression, psychosocial and/or sexual problems. Earlier referred to as conversion hysteria, functional disorders, hypochondriasis, psychogenic pain, neurasthenia, hyperventilation syndrome and Briquet's syndrome, they have now been brought together under the rubric of Somatoform Disorder or simply, somatization (American Psychiatric Association, 1987; World Health Organization, 1992). The problem may be much more common in developing countries where it is said that mental distress are often experienced and expressed in somatic terms (Kirmayer, 1996; Bracken et al., 1995). For example, in Tamil culture, *perumuchu* (a form of sighing respiration) signals deep psychological distress expressed under psychosocial stress situations (Sreeharan, 1984). In times of war and other forms of severe stress the percentage of those seeking help with somatic complaints at health care facilities due to psychosocial problems, including traumatization (PTSD) is even higher (Somasundaram, Prabakaran S. et al. 1993). If we compare two studies (Somasundaram and Sivayokan 1994, Somasundaram 2001) carried out

by medical students, there are higher levels of traumatization and psychosocial consequences in patients coming for general OPD treatment at Teaching Hospital Jaffna compared to the community (see Table 3 & Figure 1). The mean stress score for the OPD attendees (41.4) was significantly higher than in the general population (36.2). Coming to the OPD is a form of help seeking behavior for their psychosocial problems. Thus in the post-war context, it could be expected that a large number with war trauma would be presenting at local OPD's and other health care facilities with somatic complaints as a form of help seeking behaviour. In addition, the above mentioned stress related conditions could be exacerbated or manifesting due to unresolved psychosocial issues, present and past. You may need to be alert to their past history of trauma so as to treat them appropriately, probably they would need psychosocial rehabilitation through a multidisciplinary approach including counselling, relaxation exercises and socio-economic rehabilitation. Victims and survivors of war have a basic right to rehabilitation as will be argued later, which we, as a health profession, are well placed to provide. Due to the stigma associated with 'mental' problems it will not be helpful to label them as psychiatric or mental health problems but to address their basic needs, including unresolved psychosocial problems, through appropriate, practical and feasible rehabilitation measures to be outlined later. In this regard, senior medical professionals and consultants can be role models for their junior staff and students by their positive attitudes, encouragements and examples. It needs to be pointed out that avoiding or neglecting to do this will be a form of omission, depriving the public of their basic right to holistic health and well-being. The right to rehabilitation cannot be dismissed as something beyond our medical responsibilities as it impinges on our community and we are caught up in the collective trauma.

Table 3 War stress in the Community compared to OPD in Jaffna

Stress factors	Community[3] (n = 98)	OPD[4] (n=65)
Death of friend/relation	50%	46%
Loss to property	46%	55%
Injury to friend/relation	39%	48%
Experience of bombing/shelling/gunfire	37%	29%
Witness violence	26%	36%
Detention	15%	26%
Injury to body	10%	9%
Assault	10%	23%
Torture	1%	8%
Indirect stress		
Economic difficulties	78%	85%
Displacement[a]	70%	69%
Lack of food	56%	68%
Unemployment	45%	55%
ill health[b]	14%	29%

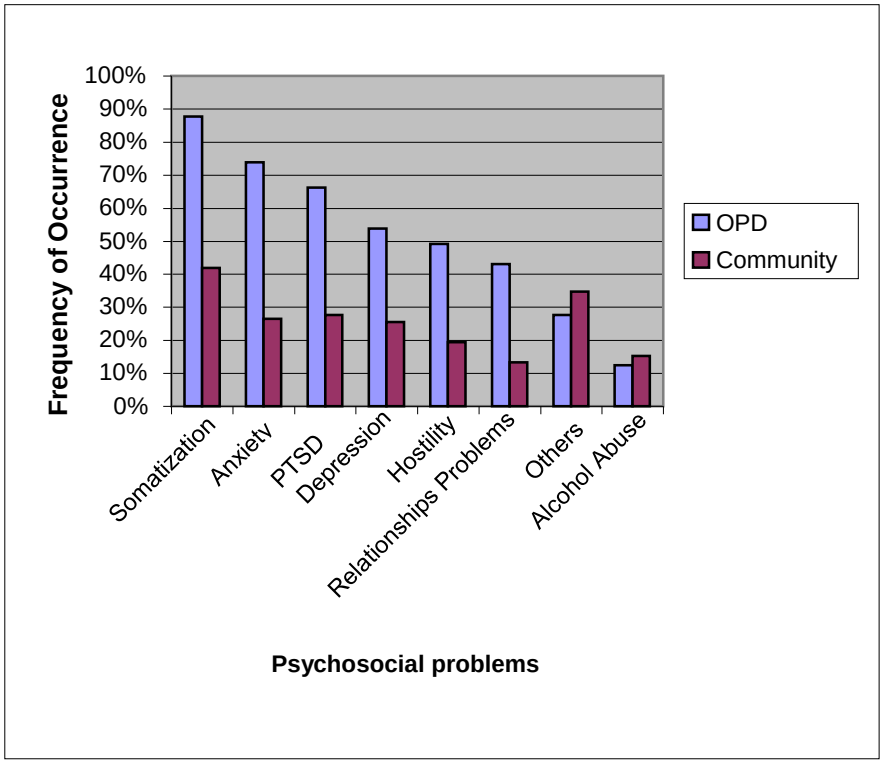
[a]Before the 1995 mass displacement when the figure would have reached almost 100%

[b]ill health due to war related injuries including amputations due to landmine blasts, epidemics like malaria, reduced resistance to infections (due to stress and malnutrition), septicemia due to lack of drugs etc. had debilitating mental effect. Dr. Sivarajah (2007) has given a detailed description of the ill health in population during the war in the Jaffna University Inaugural Prof. Sivagnanasundaram Memorial Lecture.

[3] Somasundaram, D. and Sivayokan, S. (1994). War Trauma in a Civilian Population. British Journal of Psychiatry **165**: 524 - 527.

[4] Somasundaram, D.J., Prabakaran, S., & Sivayokan, S. (1993) *War Stresses and Psychological Problems in the OPD, General (Teaching) Hospital, Jaffna and District Hospital, Tellipallai.* Paper presented at Jaffna Medical Association, Annual Sessions 27th August, 1993; & published as Somasundaram, D. (2001). "War Trauma and Psychosocial Problems: Out Patient Attendees in Jaffna." International Medical Journal **8**: 193 - 197.

Fig.1 Psychosocial problems in the community[3] compared to the OPD[4] in Jaffna



Physical and mental illness have social repercussions. In a like manner, social problems like unemployment, poverty, war, and displacement can cause psychosomatic diseases mentioned above, mental illnesses like depression and suicide (Durkheim, 1951). When considering treatment, one can also have interventions at all these levels, either alone or in combination (see Table 1).

Thus pharmacotherapy or treatment with drugs is the prototype of physical treatment. Psychotherapy, counselling, behavioural and cognitive therapies are some common psychological forms of treatment. Marital, family and group therapies as well as rehabilitation, NGO networking, occupational therapy and vocational training can be considered social forms of therapy. Likewise, it is said that spiritual meaning, hope and strength will produce resilience and improvement at all the above levels. Victor Frankel (1959) pioneered this form of treatment that he called *logotherapy*. As pointed out, the demarcation between these levels is arbitrary and used only for explanation purposes. Further, interdependence and interaction between these levels goes much deeper as Kirmayer (1996) has clearly described. Physical symptoms can be shaped by cultural beliefs and processes. In fact, the distinction between physical, psychological and social are not made in the same way in all cultures. For example, the body - mind dualism that informs Western biomedicine are not shared by many other cultures (Kirmayer, 1988, 1989). Thus it becomes clear that a holistic approach to health and rehabilitation that integrates all these levels is needed.

Individuals, families and communities in Sri Lanka, particularly in the North, the East and so called border areas of Sri Lanka, have undergone twenty five years of war trauma, multiple displacements, injury, detentions, torture, and loss of family, kin, friends, homes, employment and other valued resources (Somasundaram 2007). There are widespread individual mental health consequences shown in Fig. 2, and more recent studies showing PTSD (13%), anxiety (49%) and depression (42%) in the recent Vanni IDP's (Husain, Anderson et al. 2011). Muslim communities that were displaced forcefully continue to suffer with a variety of psychosocial problems (Commission 2011, Siriwardhana, Adikari et al. 2013). The prevalence of Common Mental Disorders (CMD) was 18.8%, with somatoform disorder 14.0%, anxiety disorder 1.3%, major depression 5.1%, other depressive syndromes 7.3%, and PTSD 2.4%. Another study among the Sri Lanka military who had been in active combat found that 6.7% had PTSD, 15.7% with Depressive Disorder, 9.5% with psychosis like Schizophrenia, Bipolar Affective Disorder and Acute Transient Psychotic Disorder, 7.9% with Somatoform Disorder, 10.8% with Dissociative Disorder, 3.3% with Traumatic Brain Injury and 3.5% with Alcohol Abuse and Dependence and Substance Abuse Disorder in addition to complex PTSD, suicide and attempted suicide and other psychosocial problems like Domestic Violence (Fernando and Jayatunge 2013). Exposure to combat was significantly greater among those who were deployed in the North and East of Sri Lanka who showed significantly higher mental health and psychosocial problems.

Families too have been affected with pathological family dynamics due to displacement; separations; death, disappearance or injury to bread winner with female headed households (Jeyanthy, Loshani et al. 1993). Whole communities have been uprooted from familiar and traditional ecological contexts such as ways of life, villages, relationships, connectedness, social capital, structures and institutions (Somasundaram 2007). The results are termed collective trauma which has resulted in tearing of the social fabric, lack of social cohesion, disconnection, mistrust, hopelessness, dependency, lack of motivation, powerlessness and despondency.

Collective Trauma

The concept of collective trauma is being introduced for the first time in a modern mental health diagnostic classification in the draft of the WHO ICD 11th revision's guidelines[5] for PTSD under cultural considerations:

"*Large-scale traumatic events and disasters affect families and society. In collectivistic or sociocentric cultures, this impact can be profound. Far-reaching changes in family and community relationships, institutions, practices, and social resources can result in consequences such as loss of communality, tearing of the social fabric, cultural bereavement and collective trauma. For example, in indigenous and other communities that have been persecuted over long periods there is preliminary evidence for trans-generational effects of historical trauma.*

[5] unpublished document of the WHO ICD-11 Working Group on the Classification of Disorders Specifically Associated with Stress

Supra-individual effects can manifest in a variety of forms, including collective distrust; loss of motivation; loss of beliefs, values and norms; learned helplessness; anti-social behaviour; substance abuse; gender-based violence; child abuse; and suicidality. These effects, as well as real or perceived family and social support, can also impact on individual resilience and outcomes".

Though both the American DSM and WHO ICD classification systems have traditionally been exclusively individual based, it is argued that a collective approach becomes paramount from a public mental health perspective where large populations are affected and where resources are limited[6]. Further, community based approaches may be more effective and meaningful in collectivistic societies such as ours in contrast to individualistic ones as found in the west where more individualistic treatments work.

Yael Danieli (2007) has written eloquently about the transgenerational transmission of trauma: '*massive trauma shapes the internal representation of reality of several generations, becoming an unconscious organizing principle passed on by parents and internalized by their children'… 'the multigenerational, collective, historical, and cumulative psychic wounding or "soul wound" over time, both in their victims' life span and across generations'*. The trauma can be transmitted epigenetically, or through parent child interactions, family dynamics, sociocultural perpetuation of a persecuted ethnic identity based on selective, communal memories (Wessells and Strang 2006) or '*chosen traumas*' (Volkan 1997); and through narratives, songs, drama, language, political ideologies and institutional structures. The long lasting impact at the collective level would then result in the social transformation (Bloom 1998), of a sociopathic nature that can be called collective trauma. Hoshmand (2007) described the systemic nature of traumatogenic forces and their impact on family, community and societal systems using a cultural-ecological perspective. Families and communities cope with the disaster in a multitude of adaptive and non-adaptive ways that can result in a variety of psychosocial problems or in positive resilience and growth. Community level interventions (Harvey 1996, Macy, Behar et al. 2004), particularly Mental Health and Psychosocial Support (MHPSS) (Galapatti, 2008), can be used to help communities affected by disasters.

The impact of mass trauma at the level of the community became evident when it came to addressing mental health problems. Conventional interventions at the individual level were inadequate. The problems at the community level too had to be understood and addressed if the individuals were to be fully helped. Further, families and communities had to recover if any meaningful socio-economic rehabilitation programmes were to succeed. In fact, in time most long-term programmes in other post disaster settings around the world began to include a community based psychosocial component, what is now being termed MHPSS, within the larger socio-economic rehabilitation and reconstruction efforts (World Health Organization (WHO) 2003, Sphere Project 2004, Inter-Agency Standing Committee (IASC) 2007).

[6] Though the author is a member of the WHO ICD-11 Working Group on the Classification of Disorders Specifically Associated with Stress, reporting to the WHO International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders, the views expressed in this presentation are those of the authors and, except as specifically noted, do not represent the official policies or positions of the International Advisory Group or the World Health Organization.

Social Capital

The construct of social capital is becoming increasingly recognized as an important factor in health, particularly mental health (Cullen and Whiteford 2001, McKenzie and Harpham 2006). Disasters such as a massive natural catastrophe or a chronic civil war can lead to depletion of social capital(Kawachi and Subramanian 2006, Wind and Komproe 2012 (in press)). According to Bracken and Petty (1998) modern wars deliberately destroy social capital assets to control communities. The covert goals may become elimination or co-option of leaders as well as control and coercion of groups, media, governance structures and institutions and in the final analysis, the minds of ordinary people.

In fact, understanding the destruction of social capital by long term civil conflict is crucial for describing collective trauma. However, contemporary social analysts caution against a simplistic or superficial view of social capital and call for a deeper, detailed, fine grain analysis of social transformation at the community level to look for positive, negative and 'perverse' changes (Goodhand, Hulme et al. 2000). Social capital encompasses community networks, relationships, civic engagement with norms of reciprocity and trust in others that facilitate cooperation and coordination for mutual benefit (Cullen and Whiteford 2001). Fundamentally it looks at social institutions, structures, functions, dynamics, and the quality and quantity of social interactions. It is a reflection of social cohesion, the glue that holds society together. Theoretically, positive social capital would increase the community's resilience, capacity to withstand disasters and to respond constructively.

Although traditional Sri Lankan communities had high levels of social capital, this was mainly in the form of social, family and intra-ethnic bonding. The root cause of civil conflict would stem from the lack of bridging social capital due to competitive and antagonistic inter-ethnic relations resulting from polarized and exclusive ethnocentric perceptions. This could arise from a myriad of further sub-causes like horizontal inequalities (Stewart 2001) in opportunity; income and economic resources (poor linking); ethnic suspicions and tensions (poor bridging); group exclusion; disparities in political access and participation; weak civic engagement with the government leading to weak community links with the state; polarization between ethnic communities and experiencing ethnic based discrimination and humiliation. The driving force for the conflict would have been ethnic identity and consciousness (Somasundaram 1998). The insecurity, fear and strong feelings aroused when a group's identity, culture and way of life, its' access to land, resources and survival are perceived as being threatened are mobilized into collective actions, defiance, resistance, militancy and violence. The sources of growing frustrations and rebellion can be traced to 1) Power differentials between the rulers and the governed in a hierarchical, authoritarian society; 2) The poor or absent access to sources of power, decision makers, control over opportunity structures and resource distribution; and 3) Discrimination as a group showing the lack of vital vertical or linking social capital among the minority Tamils.

As a consequence of the long drawn out conflict, the '*common **community coping strategy** was to fall back on group based networks and family ties. The most resilient sources of social capital are socially embedded networks and institutions*' (Goodhand, Hulme et al. 2000). This resulted in strengthening social bonding within each ethnic group while weakening bridging social capital between the different ethnic groups. The goal of psychosocial rehabilitation and national reconciliation would be to rebuild these interdependent, community bridges that were once there between the ethnic groups.

Conflict entrepreneurs, that is, social actors with vested interest in maintaining ethnic tensions, had socially engineered 'perverse' social capital gaining power, legitimacy and social control. The resulting social transformation had 'led to the emergence of a new leadership, it had altered gender and generational hierarchies and created a 'new rich' entrepreneurial class in a 'dirty war' context (Nordstrom 2004, Somasundaram 2010). However, in the long term with competing regimes of control and terror, even the bonding social capital has been eroded, bridging social capital between groups consistently undermined and people have lost trust in social institutions, structures and governance. Communities under stress manifest with health problems like heart disease, depression, stress related conditions, behaviours contributing to chronic illness and reduction in immunity to infection and cancer develop with breakdown of social capital (Cullen and Whiteford 2001) (Table 2). Civil conflict causes community trauma by the creation of a '*repressive ecology*' based on imminent, pervasive threat, terror and inhibition that causes a state of generalized insecurity, terror and rupture of the social fabric (Baykai, Schlar et al. 2004).

Civil conflict and war*, "weakens social fabric. It divides the population by undermining interpersonal and communal trust, destroying the norms and values that underlie cooperation and collective action…." This damage to a nation's social capital-the norms, values, and social relations that bond communities together, as well as the bridges between communal groups (civil society) and the state-impedes the ability of either communal groups or the state to recover after hostilities cease. …economic and social development will be hindered unless social capital stocks are restored... Such an understanding could enhance the abilities of international actors and policymakers to more effectively carry out peacebuilding- relief, reconstruction, reconciliation, and development. (Colletta and Cullen 2000).*

Post-war context

For a qualitative assessment of the current post-war situation in Northern Sri Lanka, we adapted the trauma grid (Papadopoulos 2007) as a tool to organize the data and conceptualize the functioning of the community in the context of different levels: individual, family, community and sociocultural, as these maybe affected in different ways, positively, negatively or in varying combination of both (Somasundaram 2012, Somasundaram and Sivayokan 2013). The findings (see Table 4) were divided into expected ordinary reactions to human suffering, more distressful psychological suffering which would benefit from community and family support and diagnosable psychiatric disorders needing professional help. These could be understood as a continuum and not discrete categories with rigid boundaries of exclusion. Positive effects included resilience and beneficial transformative or adaptive change. The identified changes were located as belonging to the individual, family, community or sociocultural levels. Some responses overlapped, saddling several levels; for example, grief which manifested at the individual level as normal, prolonged or pathological grief but also at the family and community levels when members of the family or important community leaders died suddenly in traumatic circumstances.

Table 4 Trauma Grid (Adapted to the Sri Lankan context from Papadopoulos, 2007)

Effects	Negative effects			Positive effects	
Levels	***Ordinary human suffering***	***Distressful psychosocial reactions***	***Psychiatric disorders***	***Resilience***	***Adversity Activated Development***
Individual	Sorrow, worries, normal grief, fear, stress, anger, uncertainty, magical thinking, psychological trauma, injuries, handicap, losses, low educational attainment	Intense and extreme levels of suffering, complicated grieving, adjustment disorders, maladaptive coping, alcohol & drug (including non-prescription medication) use, somatization, help seeking behaviour, change in ideology/faith, fear of future, suicidal thoughts/behaviour	PTSD, Depression, Anxiety disorders, Prolonged Grief Disorder, Alcohol & Drug Abuse, Complex PTSD, DSH, Brief (reactive) psychosis, Dissociative episodes, Personality disorders	Independent, mature personality, adaptive coping mechanisms, flexibility, establishing and maintaining relationships, planning for their future. socialization and networking skills, entrepreneurship	Post Traumatic Growth, female leadership, empowerment, liberation, creative activities, nontraditional thinking, innovativeness, involving in nontraditional jobs
Family	Displacements, separations, deaths, handicap, loss of properties and structures (buildings). disappearances, orphans, single parents, family disharmony, break-up of extended family system	Grief, family conflicts, domestic violence, separations, divorces, extra-marital relationships, unwanted pregnancies, child & elder abuse, poor parenting, scapegoatism	Dysfunctional family units, morbid jealousy, family pathology, child psychiatric disorders or emotional and behavioural problems among children, homicide-suicide pack,	Unity of nuclear families, cohesion, extended family ties, support system, new relationships, continuous of goals and aspirations	Functional female headed households, diversity in marriages, Split families
Community	Displacements, up rootedness separations, destruction of normal systems and structures, dysfunctional structures & institutions, loss of buffer system, reshuffled neighborhood, depleted social capital, poverty and unemployment/ underemployment	Denial, rationalization, intellectual dissonance, hopelessness, helplessness, powerlessness, herd instinct, silence, suspicions, distrust, uncertainty, breakdown of ethical and moral values, catharsis, sexual abuse,	Collective trauma, suicide mass hysteria, impulsiveness and antisocial behaviours.	Rituals, revival of traditional arts (koothu), ceremonies, remembrance observations, monuments and grave stones, social functions	Acceptance of female leadership, female empowerment & liberation, new ways of thinking and breaking of traditional boundaries, entrepreneurship, awareness of global trends emerging new form of arts (like cinema, short films), meaningful narratives, practical (problem solving) support, micro finance schemes and economic development
Sociocultural	Depleted social capital, dysfunctional structures & institutions, patronage, authoritarian personalities, corruption	Hopelessness, helplessness, powerlessness, silence, suspicions, distrust	Collective trauma, suicide	Rituals, ceremonies, remembrance observations, social functions, increasing tolerance about others view, culture and life style,	Reduction of caste barriers, female leadership, empowerment, liberation, Multi-cultural milieu, rights oriented thinking and behaviour

There was widespread exposure to potentially traumatizing events that under normal conditions would be considered extreme and would cause distress in most people. Commonly these traumatic events had been multiple and chronic. For example, a University of Jaffna Community Medicine Research study of medical faculty students from the Vanni in 2010 (see Table 5), found 82% had been directly exposed to the war situation, 67% had barely escaped death, 63% had lost family or friend, 43% had witnessed killing, 27% had been imprisoned, 23% kidnapped or abducted, and 18% had been tortured or beaten (Shayshananth and Sivashankar 2010). Using the Harvard Trauma Questionnaire, thirty eight percent of the students had experienced 1-3 traumatic events, 28% had experienced 4-7 traumatic events and 10% had experienced 8-11 traumatic events. It was indicative of the prevailing oppressive politico-military situation that the previous VC did not allow the study to be extended to other faculties. Similarly, the University of Jaffna Ethical Committee refused clearance for a qualitative study of the final Vanni war victims. Nevertheless the study was done and published in a peer reviewed, open access medical journal (Somasundaram 2010). We are partly responsible for creating the "repressive ecology" out of understandable fear and terror. Freeing ourselves of this mind set would be a fundamental aim of psychosocial rehabilitation.

Table 5 War Trauma among Vanni and Jaffna Medical Students

Traumatic Events	**Vanni students** N= 60		Jaffna students N= 60	
	n	%	n	%
Lack of food or water	29	48	5	8
Lack of housing or shelter	40	67	5	8
Unnatural death of family/friend	38	**63**	11	18
Murder of family member/friend	21	**35**	9	15
Being close to, but escaping, death	40	**67**	9	15
Ill health without medical care	16	27	5	8
Witnessing killing of stranger(s)	26	**43**	5	8
Tortured or beaten	11	**18**	2	3
Forced separation from family	19	32	3	5
Being abducted or kidnapped	14	**23**	0	0
Made to accept ideas against will	42	70	15	25
Serious injury	4	7	2	3
Forced isolation from other people	16	27	1	2
Being in a war (combat) situation	49	**82**	29	48
Imprisonment against will	16	27	1	2
Rape or sexual abuse	0	0	0	0

Orator's emphasis in **Bold** Source: (Shayshananth and Sivashankar 2010)

In our qualitative study (Somasundaram and Sivayokan 2013), forced displacement in extreme situations among the Vanni population was universal and commonly multiple (up to 10 or more displacements in many cases). The unexpected and sudden death of a close family member(s), relation(s), and friend(s) in distressing ways was again almost universal experiences. Experiencing injuries, disappearances, separations, internment, arrests, detentions, beatings, bombings, shelling's, and shootings as well as witnessing these events were common. Undergoing extraordinary physical hardships like thirst, hunger, long marches, and lack of medical attention or shelter were experienced by most families and communities. As such these experiences were considered for the purpose of this study as norms for the population and placed under 'Ordinary human suffering'. When these experiences caused observable behaviour or complaints of a psychosocial nature amounting to distress they were placed under 'Distressing psychosocial reactions'. When the signs and symptoms met criteria for a diagnosable condition, they were categorized as 'Psychiatric disorders'.

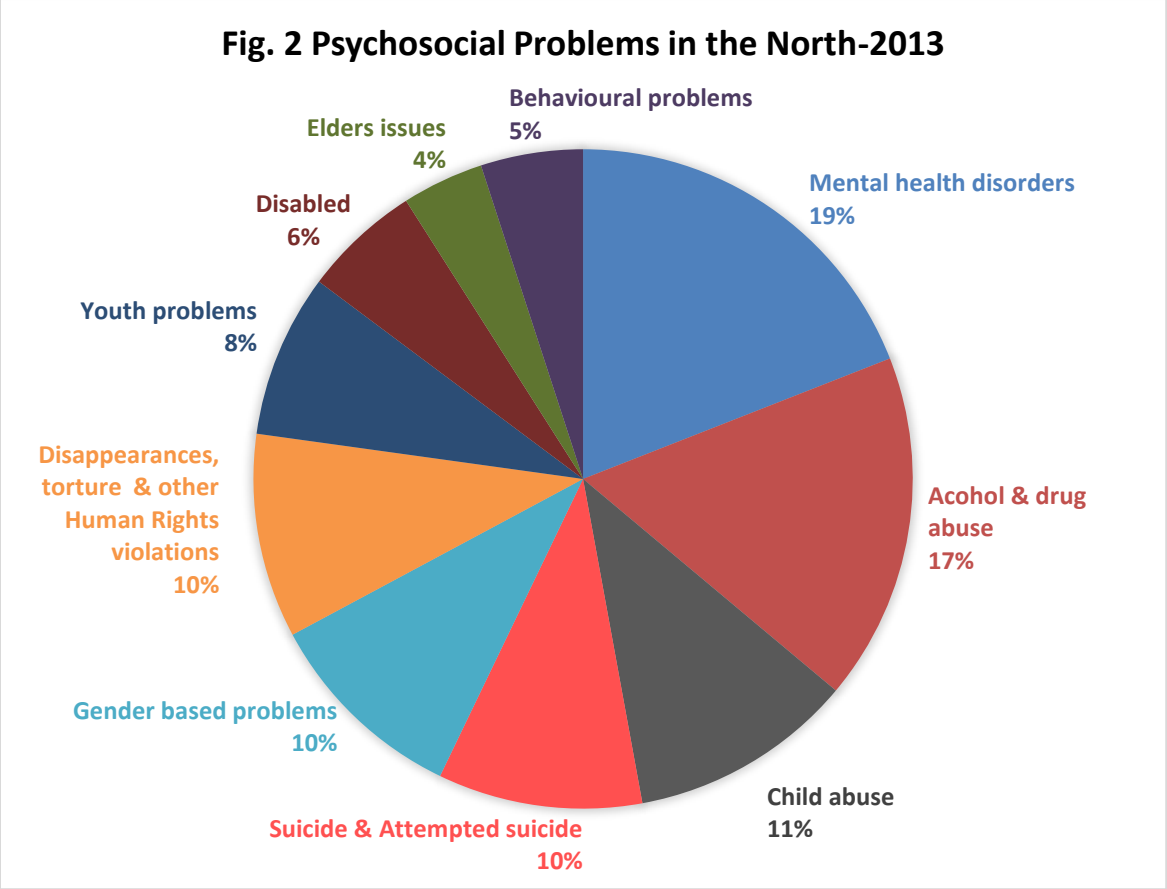
It is noteworthy that examples of mass hysteria symptomatic of underlying insecurity and 'repressive ecology' (Baykai, Schlar et al. 2004) in the post war context, such as aspects of the *grease putham* phenomena (Hariharan 2011), were reported. The *grease putham* is a cultural description, way of experiencing and perceiving in a state of heightened apprehension, insecurity that manifests in the way a community reacts to real or perceived attacks. A group of mental health workers, former graduates of the Jaffna Medical Faculty, who were returning late at night from field work were set upon by a community vigilante groups that had been formed to ward off *grease putham* attacks and barely escaped being man handled. They were reassured that was an occupational hazard of working late! Herd instinct in election voting or strikes was mentioned. The exodus of Tamils seeking to escape to Australia by boat was called a mass hysteria (Brewster 2012, Davis 2012) but a more apt terms would have been herd instinct. It could be observed during this period that ordinary people talked about fleeing to Australia by boat to escape the hopeless situation. A more recent example was in relation to the recruitment of Tamil females from Killinochchi into the army where several developed possession states and conversion hysteria (Christopher 2013).

The social disorganization led to unpredictability, low efficacy, low social control of anti-social behavior patterns and high emigration which in turn causes breakdown of social norms, anomie, learned helplessness, thwarted aspirations, low self-esteem, and insecurity. Social pathologies (Fig. 2) like alcohol (Fig 3) and substance abuse; violence, gender based- and child- abuse (Fig. 4 & 5 and Table 6 & 7); female headed households; elder abuse and neglect; suicide and attempted suicide (Fig. 6 & tables 8 a & b) have increased. Child abuse, particularly child sexual abuse, in 2011 compared to 2007 have increased (Fig. 4) (Northern Provincial Council 2013). A worrying post-war development has been the increasing corporeal punishment in schools that the JMA Secretary as the former Chair of the Child Protection Committee in Jaffna will know was brought under control during the war years by concerted efforts. Some teachers rationalize by blaming increasing student violence. This is an area of public concern that the JMA can take a lead role in addressing through health education and awareness programmes. Other wide-spread, chronic post-war consequences with psychosocial repercussions that need addressing would include large numbers of disabled survivors with loss of limbs needing prosthesis like Jaipur foot (Table 9) and other orthopaedic

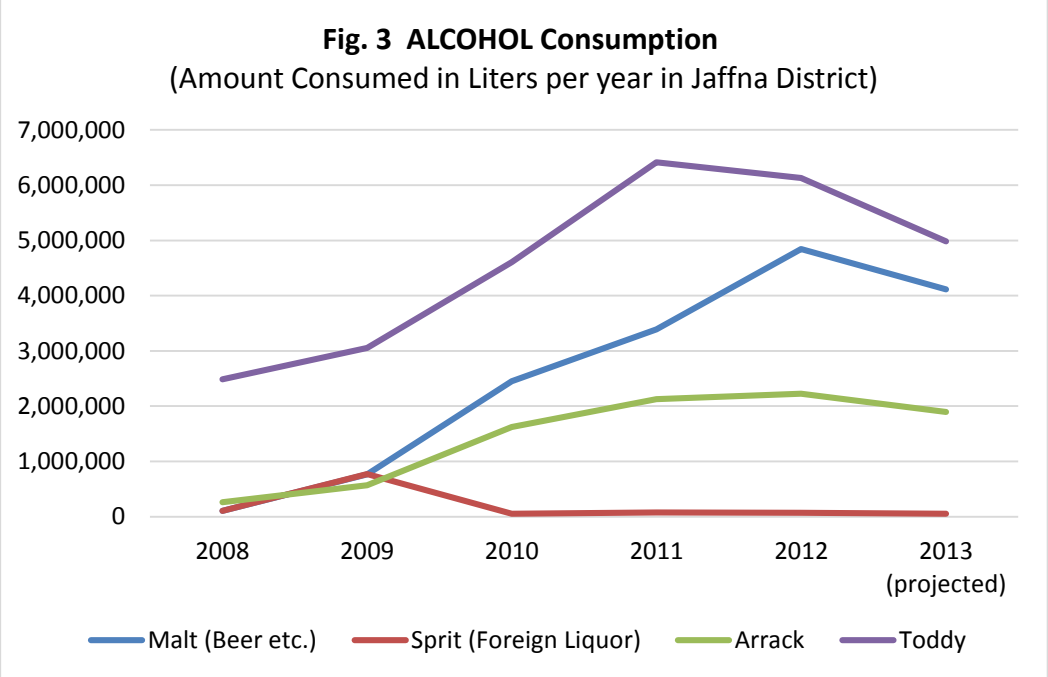
and spinal problems, high prevalence of respiratory diseases called pneumoconiosis due to inhalation of the dust of shells and bombs and unremoved shell pieces (Jamunantha 2012). Another III MBBS research project that was published in an international medical journal documented considerable psychosocial problems among landmine victims (Gunaratnam, Gunaratnam et al. 2003). Fortuitously, landmine injures in the north are on the decline (Northern Provincial Council 2013). The intense landmine clearing operations are bearing fruit and we must be thankful for their dedicated work. Some have been injured while at work.

Various behavioural manifestations of risk taking such as Road Traffic Accidents (RTA's), partly due to lack of diligence for safety, discipline and respect for others; and disinhibition of social constraints for example, unwanted and teenage pregnancies, legal and illegal abortions (Fig. 5), extramarital affairs as well as phenomena showing drop in motivational and traditional values for example school dropouts and adolescent problems indicate wider post-war psychosocial issues (fig 2). Although most of these data are preliminary and has not been properly analyzed for reliability or causative social determinants, some trends can be ascertained where the health profession can make a beneficial impact. For example, an unconfirmed UNICEF research in the East Sri Lanka (Koralaipattu & Eravur), links school dropouts with teenage marriages and pregnancies (Valampuri A-11 2013). An enterprising Medical Officer of Health (MOH) or School Medical Officer of the area could investigate this report and take appropriate action such as health education to the public and schools, which could prevent school drop outs, teenage pregnancies and possible illegal abortions with its harmful consequences.

Alcohol consumption can be linked to RTA's, crime, DV and child abuse. One concern raised in the qualitative study above was the increasing alcohol use or experimentation by youth and student population. One positive post-war development has been the dramatic decrease in Kassippu brewing and consumption (except perhaps in some areas), possibly due to wide availability of legal alcohol including arrack, beer and foreign liquor. Obviously, Kassippu brewing has become a less profitable income generating activity for desperate families. Toxic consequences of Kassippu to the liver and other organs used to fill up the medical and other wards during the war years. However, there are reports from the field that Kassippu use continues but has been driven underground. Generally, except for child abuse, particularly child sexual abuse, there appears to be a slight improvement or stabilization in the projected figures for 2013 compared to previous post-war years as far as the psychosocial problems discussed here. This may be an indication that the worst post-war consequences are over, that time is a healer and some interventions are working.



Source: Focus Group Discussion with Psychosocial Workers in Jaffna



2013 figures projected from data up to July
Kassippu figures not available

Source: Excise Department, Jaffna District

Table 6 Child Abuse in Jaffna District

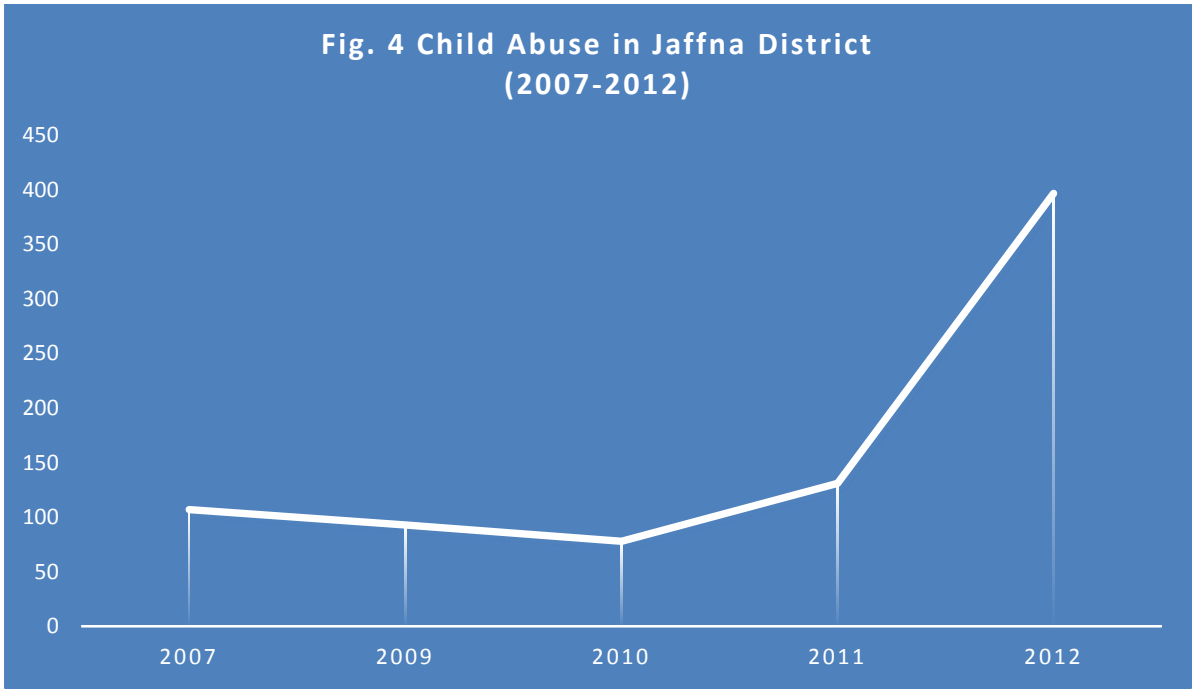
Type of Abuse	2007	2009	2010	2011	2012
Sexually abuse	32	60	37	66	74
Physical abuse	31	11	07	12	35
Psychological abuse	21	06	05	01	08
Attempted suicide	9	01	03	05	07
Committed suicide	2	09	10	01	05
Neglected children	0	01	01	16	31
Kidnaped children	12	01	04	02	01
Trafficking		01	00	01	04
Threatening		03	00	00	
Separated children		00	11	13	18
Early child marriage		00	00	14	
Total	**107**	**93**	**78**	**131**	**397**

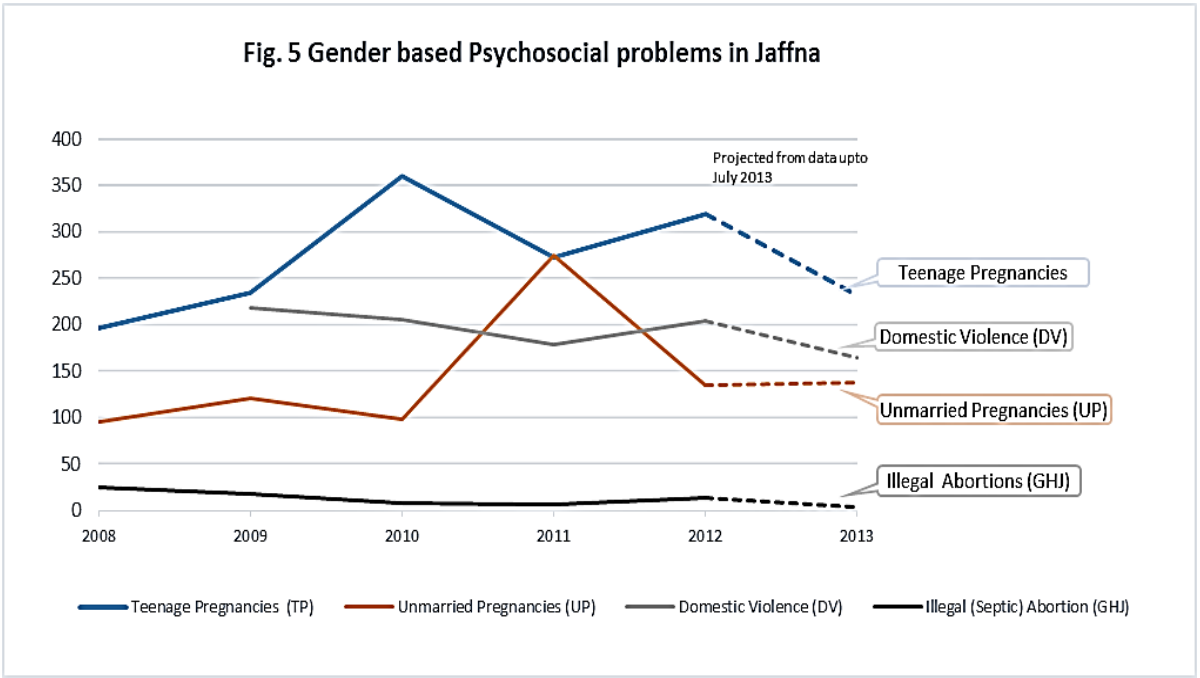
Source: Probation Department, Jaffna

Table 7 Child Abuse by Districts, N.P.- 2011

Type of Abuse	Jaffna	Kilinochchi	Mannar	Mullaitivu	Vavuniya
Sexual Abuse	65	28	15	32	39
Physical abuse/Domestic Violence	12	2	11	32	45
Mentally abuse	1		6	7	2
Attempted to Suicide	5	3	2	9	3
Committed Suicide	1				1
Neglected Child	16	7	13	11	57
Conflict with in Law	25	13	11	15	49
Kidnapping	2	7	5	2	4
Lost				3	
Separated	13		2	11	
Trafficking	1		4		
Threatening/Thief			1		
Psychological		127			
Protection Issue					
Conflict Family					

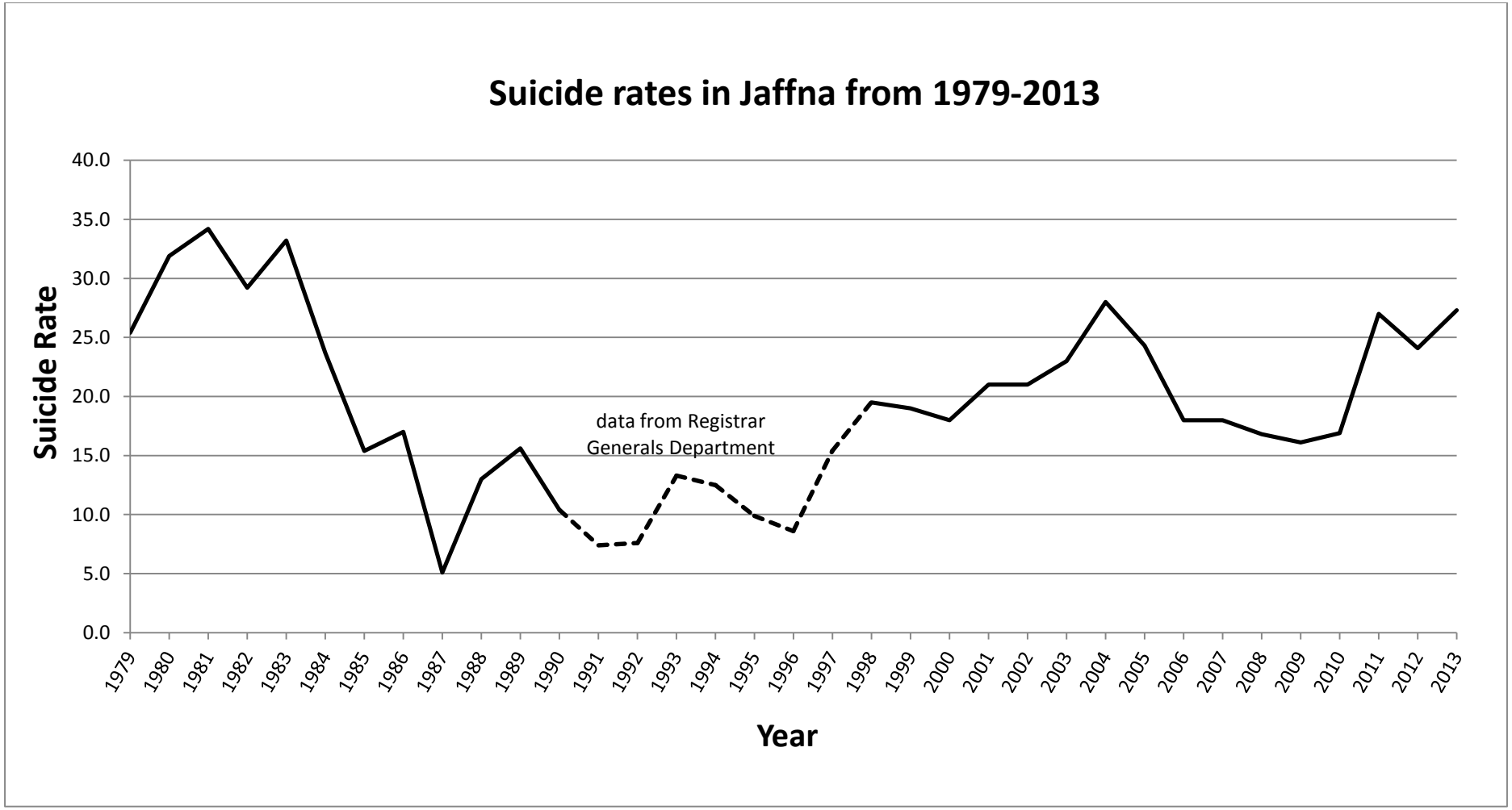
Source: Statistical Information-2012 (Northern Provincial Council 2013)





Source: RDHS (Maternity and Child Health unit)

Fig. 6 **Suicide rates in Jaffna (1979-2013)**



Source: Jaffna District Courts
1990-97 data from Registrar Generals Department
2013 figures projected from data up to July

Table 8 a **Suicides in Killinochchi (Killinochchi District General Hospital (DGH) & Registrar General Department**)

Year	Number	Population	Crude Rate[1] (per 100,000)
2003[+]	2 (40)		(28)
2004[+]	26 (24)	141843	18 (17)
2005	(54)		(38)
2006	(29)		(20)
2007-9	Not available		
2010	29	115,417 (Nov., 2010)[*]	25
2011	42	121,318 (Dec., 2011)[*]	35
2012 (first six months)	19	124142[*]	30.6

[1]Crude rates- Though not strictly reflecting district rates, calculations were done from Killinochchi Hospital data and where available Registrar General Department data to give an idea of trends.

[2] ( ) Registrar General Department data within parenthesis in red colour

[+] Jeyakumar, J. (2005) Study of Suicide and Attempted Suicide in Killinochchi, Killinochchi Medical Association, Killinochchi

*Population figures from the United Nations Office for the Coordination of Humanitarian Affairs (United Nations Office for the Coordination of Humanitarian Affairs (OCHA)) http://www.hpsl.lk/Catalogues.aspx?catID=74

Table 8 b **Attempted Suicides (Killinochchi DGH**)

Year	Number
2000[+]	26
2001[+]	80
2002[+]	68
2003[+]	96
2004[+]	186
2010	180
2011	331
2012 (six months)	177 (354- projected)

[+] Jeyakumar, J. (2005) Study of Suicide and Attempted Suicide in Killinochchi, Killinochchi Medical Association, Killinochchi

Table 9 **Artificial limbs fitted by Jaffna Jaipur Rehabilitation program**

DEVICES	2008	2009	2010	2011
Prosthesis	220	302	416	337
Orthosis	110	112	154	193
Mobility Devices	114	114	343	296

Source: Jaipur Foot Program, Jaffna

In the Trauma Grid (Table 4), individuals, families or communities showing any positive response, coping, adaptation or growth, were placed under 'Resilience' or 'Adversity Activated Development (ADD)'. Under the circumstances, the lack of adverse reactions to these extraordinary experiences, termed here as 'Ordinary human suffering' could be considered positive coping. It is good to keep in mind that communities may find '*meaning in their suffering and are able to transmute their negative experiences in a positive way, finding new strengths and experiencing transformative renewal'* (Papadopoulos 2007). These categorizations have public mental health implications. Programmes and interventions should promote positive adaptations, resilience, Post Traumatic Growth and effective strategies that people have used to cope with human loss and suffering. Distressful psychosocial reactions and psychiatric disorders would need appropriate support, treatment and rehabilitation measures, particularly in a resource poor setting, community level approaches.

Important characteristics of resilient communities are functioning family, extended and neighbourhood support systems and networks. Public mental health strategies should promote where available or help rebuild bonding social capital. These would include community resources like respected elders, traditional healers, religious leaders and organizations, institutions like schools, health facilities, governmental and non-governmental organizations; cultural practices; community level conflict resolving mechanisms and functioning structures like judicial system, democratic practices and access to authorities, free media, and reliable information. Economic and income stability, employment, occupations and traditional vocations, food, shelter, security, and other essential needs being met would help communities cope with adversities and shocks to the system. Norris et al. (2008) identify four primary sets of adaptive capacities for community resilience- economic development, social capital, information and communication, and community competence. Community competency refers to the capacity, resources and skills within the community to act together, cooperatively and effectively, to meet challenges. Unfortunately in post-disaster situations, particularly chronic war contexts some or many of these resources and support systems would be affected, dysfunctional or not available. Community responses and coping may thus become compromised. A vicious resource loss cycle (Hobfoll 1998) where breakdown of social support, networks, leadership, economic resources and material goods will create a downward spiral of a deteriorating situation of increasing needs and dysfunction, one lack feeding the other deprivation.

Yet, critical challenges and adversity may just provide the impetus, catalytic stimulus for change and social transformation. Thus the breakdown of traditional forms of oppression and rigid hierarchical structures like caste, feudal ownership and patriarchal female suppression could lead to more positive emancipation and development. New organizations, networks, relationships, friendships, forgetting of old quarrels and conflicts, shared memories and experiences could lead to community growth. Motivated and vibrant leadership may emerge while older, ineffective and anachronistic methods are shed. There can be radical and revolutionary alteration in the social trajectories due to critical challenges. Common people, oppressed and excluded minorities could gain more power and access to resources due to shifts in the social system or out of collective action. Collective consciousness can be awakened leading to more awareness and knowledge. According to the Social Policy Analysis and Research Centre (SPARC) of the Faculty of Arts, University of Colombo, the breakdown in social structures and institutions creates an opportunity for empowerment, collective

transformation and re-alignment of social dynamics, "*challenging existing structures of power and achieving a shift in power relations, ultimately resulting in the transformation of the existing social order*" (Psychosocial Assessment of Development and Humanitarian Interventions (PADHI) 2009).

There is some economic and infrastructure development in the war torn areas (Presidential Task Force for Resettlement Development and Security –Northern Province (PTF) 2013) but largely illusionary (Sarvananthan 2012), not aiding the psychosocial recovery of the victims. Four years after the ending of the war, legitimate reparation, community recovery and national reconciliation are yet to take place. The community and its members need to be able to benefit from the developmental programmes being undertaken. Economic recovery will not be sufficient, people need 'to reconstruct communities, re-establishing social norms and values' (Weerackody and Fernando 2011). International law recognizes the Principle of *Restitutio ad integrum* for the redress of victims of armed conflict to help them reconstitute their destroyed 'life plan' (Villalba 2009, Evans 2012). This justifies the need for rehabilitation as a form of reparation clarified by the UN 'Basic Principles and Guidelines on the Right to a Remedy and Reparations for Victims' as taking five forms: restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition (UN General Assembly 2005). This should necessarily include psychosocial rehabilitation at the individual, family and community levels (Somasundaram 2010). Significant advances have taken place in recognizing universal human rights, in particular the right to health that is now enshrined in international human rights law, humanitarian law and criminal law. Many of these relevant treaties have been ratified by states, including Sri Lanka, and found their way into domestic law. Having established human rights, the need to translate consequences of breaches, the right to reparations for serious violations and the state's responsibility to provide remedy is slowly attaining consensus and customary status. The Rome Stature of the International Criminal Court (ICC), notably Articles 75 and 79 (ICC, 1998), establishes new ground by affirming the rights of victims to reparations. There is increasing recognition of state responsibility to provide redress to victims irrespective of who was responsible for the violations. The right to rehabilitation is referred to in the Convention on the Rights of the Child (CRC), the Convention on Economic, Social and Cultural Rights (CESC), the Convention on the Rights of Persons with Disabilities (CRPD) and especially in the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment. According to the Committee against Torture's General Comment 3 (United Nations (UN) 2012), state parties are responsible for redress and victims have an "*enforceable right to fair and adequate compensation, including the means for as full rehabilitation as possible*." However, implementation remains a challenge; but one, where in Sri Lanka, public mental health could play a constructive role through a community based approach.

Disregard for the rights of victims to reparations is common in most transitional justice initiatives that aim primarily at establishing criminal accountability of perpetrators. Ordinary citizens should generally benefit from normal development efforts but victims have a special right to reparation measures. Christine Evans (2012) uses the examples of Guatemala, Sierra Leone, East Timor and Colombia to illustrate reparation measures for victims undertaken in post conflict situations as a result of domestic truth commissions with varying degrees of engagement and support from the international community and UN along tempered by geopolitical factors. Gameela Samarasinghe (2013) interprets the spirit of the report from the

Sri Lanka Lessons Learnt and Reconciliation Commission (LLRC) "*as a whole acknowledges trauma and the prolonged suffering people have faced. The commission recognizes that the suffering that people have faced needs to be addressed through counselling, justice mechanisms, compensation and acknowledgment if reconciliation is to take place. The commission also noted that reconciliation and peace can only be achieved through systemic changes in law and state structures and though a process of integration* (Commission of Inquiry 2011)". Christine Evans (2012) makes the case that the state should bear primary responsibility to provide reparations for victims of armed conflict, though the International community and the UN system can play a major role. It is unlikely that the majority of survivors will have the opportunities or will to complain, claim or avail themselves of reparation benefits. Thus it is relevant that the Inter-American Court of Human Rights in Latin America has issued comprehensive reparations for the benefit of affected communities, including measures that take into account cultural aspects. The European Court of Human Rights is also developing judgements that seek to address systematic violations (Evans 2012).

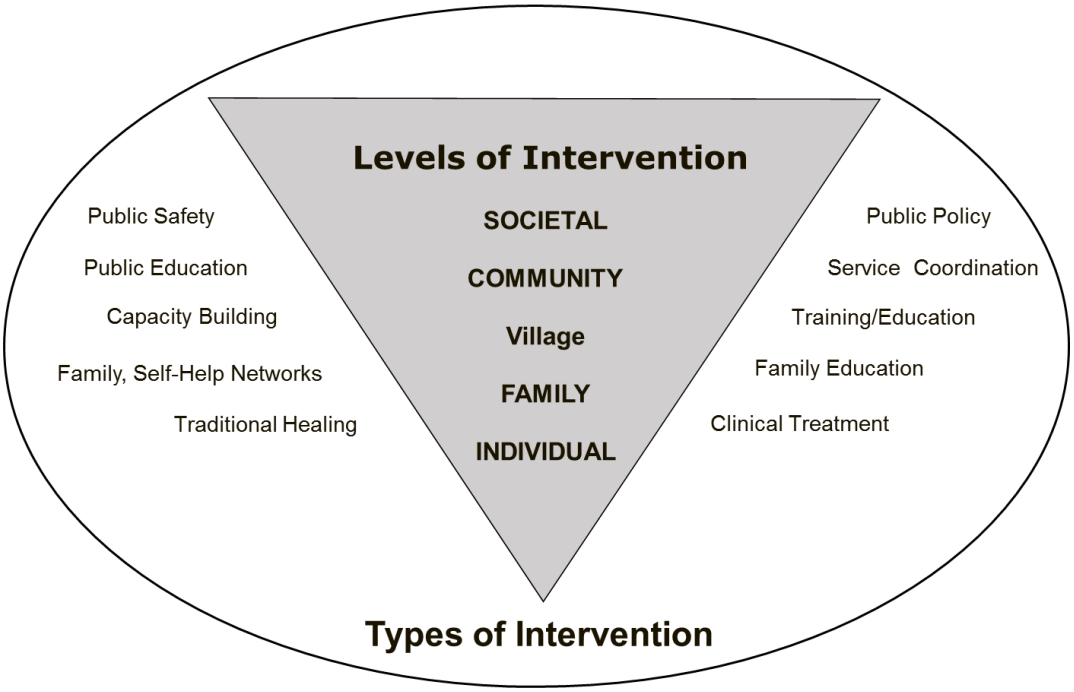
In Sri Lanka, the most cost-effective remedy for state responsibility to provide redress to victims would be a community based approach that would benefit the largest number of victims, due to the systemic nature of collective trauma as well as the state's financial and judicial constraints. Unless victims of serious human rights violations receive reparations, they are likely to continue to suffer loss of dignity, social exclusion and stigma. They should be given an opportunity to participate in society on an equal footing to others (Evans 2012). Sveaass (2013) advocates that rehabilitation is a substantive right. Health professionals must be active in ensuring that effective rehabilitation is realized.

Due to the widespread nature of the impact of war trauma, it may be more appropriate to use public mental health approaches in most post-war states for the rehabilitation of affected populations. Apart from the equivocal evidence on the efficacy of individualized approaches based on medications and CBT for psychiatric conditions such as PTSD (Institute of Medicine (IOM) 2008), the supraindividual trauma at the family and community levels in a collectivistic society would be best addressed through a community based approach that would reach the largest population. Further, community based approaches will enable one to undertake preventive, promotional and long-term public mental health activities at the same time. The opportunity provided by post war context could be utilized to develop a comprehensive community based programme as envisioned in the Sri Lanka Mental Health Policy (World Health Organization 2005) as well as 'building back better' as was done after the Tsunami in Sri Lanka (World Health Organization 2013). The post-war rehabilitation should be done with the same commitment and effort as was seen after the Tsunami as the impact and consequences are similar if not worse (Somasundaram 2007). Tragically, Psychosocial rehabilitation has been neglected, and even prohibited in the militarized post-war context (Somasundaram 2012, Samarasinghe 2013, Somasundaram and Sivayokan 2013). Individuals and families can be expected to recover and cope when communities become functional, activating healing mechanisms within the community itself.

Community level Rehabilitation

A comprehensive and useful conceptual model (Fig. 7) for psychosocial and mental health rehabilitation is an inverted pyramid with five overlapping and interrelated levels of interventions prepared for UN and other Disaster workers by the United Nations and International Society for Traumatic Stress Studies (Green, Friedman et al. 2003).

Fig. 7 **Conceptual Model for Psychosocial Interventions in Social and Humanitarian Crises**



At the top of the pyramid are societal interventions designed for an entire population, such as laws, public safety, public policy, programmes, social justice, and a free press. Descending the pyramid, interventions target progressively smaller groups of people. The next two layers concern community level interventions which include public education, support for community leaders, development of social infrastructure, empowerment, cultural rituals and ceremonies, service coordination, training and education of grass root workers, and capacity building. The fourth layer is family interventions that focus both on the individual within a family context and on strategies to promote wellbeing of the family as a whole. The bottom layer of the pyramid concerns interventions designed for the individual with psychological symptoms or psychiatric disorders. These include psychiatric, medical and psychological treatments which are the most expensive and labour intensive approaches that require highly trained professional staff. The main interventions we have used here in the North are given in box 1.

Box 1 Methods of Psychosocial Rehabilitation (Somasundaram 1997)

- Individual Psychoeducation
- Psychological First Aid
- Psychotherapy
- Behavioural-Cognitive methods
- Relaxation Techniques
- Pharmacotherapy
- Group therapy
- Family therapy
- Expressive methods
- Rehabilitation
- Community Approaches
  - Community Psychoeducation
  - Training of community workers
  - Public mental health promotion activities
  - Encouragement of indigenous coping strategies
  - Cultural rituals and ceremonies
  - Community interventions
    - Family
    - Groups
    - Expressive methods
    - Rehabilitation
- Prevention

Psychoeducation

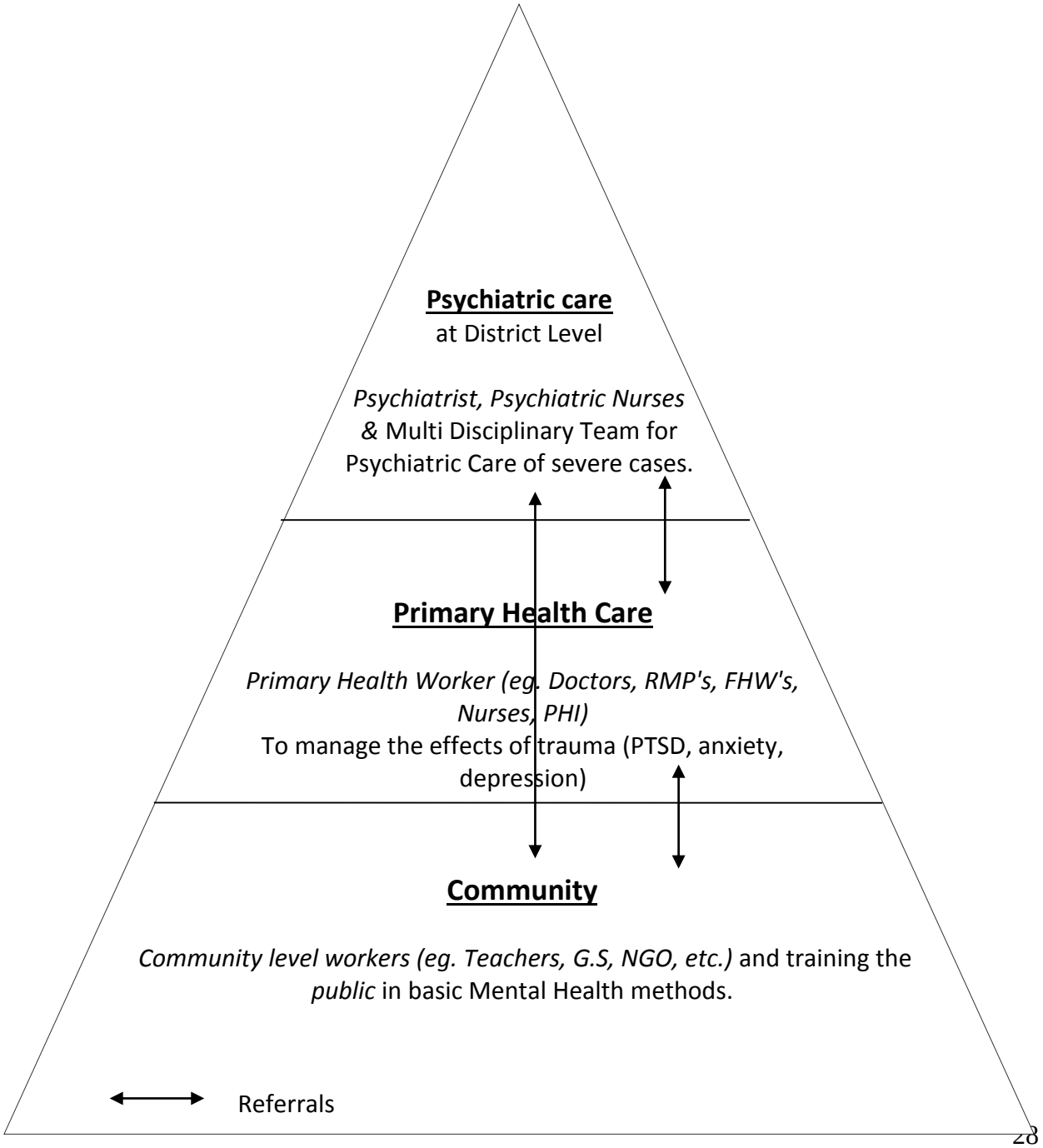
Basic information to individuals and to the community about what has happened, where help can be obtained, instructions about available programmes and assistance is essential. Psychoeducation about trauma for the general public, what to do and not to do, can be done through the media, pamphlets, posters and popular lectures.

Training

Training of grass root community level workers in basic mental health knowledge and skills is the easiest way of reaching a large population. They in turn would increase general awareness and disseminate the knowledge as well as do preventive and promotional work. The majority of minor mental health problems could be managed by community level workers and others referred to the appropriate level (see Fig. 8). It is important that primary level or community level workers adopt a holistic approach, incorporating the different aspects of physical, mental, family, culture, community, societal health in a horizontal integration rather than as vertical programmes as practiced in Sri Lanka today. Primary Health Workers including doctors, medical assistants, nurses, Family Health Workers; health volunteers and other grass-root resources like teachers, Gramma Sevakas, elders, traditional healers, priests, monks and nuns; government servants, particularly Divisional (AGA) level officers like Social

Workers, Samurdhi Officers, Child Probation and Rights Officers, Women Development Officers, Rural Development Officers, Cultural Officers, Youth officers, and Sports Officers; Non-Governmental Organization (NGO) staff, volunteer relief and refugee camp workers are ideal community level workers for training. Trauma and mental health should become part of the normal curricula of all health staff and teachers. Because of the strong stigma associated with 'mental' conditions, it may be prudent to deal with psychosocial problems and minor mental health issues themselves outside a psychiatric facility by frontline workers, including doctors, being prepared to spend some time and effort, and an example set by senior workers like consultants.

Fig. 8 **Referral structure for Management of mental health problems (at District Level)**



A manual based on the WHO/UNHCR (1996) booklet, "*Mental Health of Refugees",* was adapted to the Tamil cultural context and is now in its 3rd edition (Somasundaram and Sivayokan 2001). A Training of Trainers (TOT's) in community mental health using this manual could be done. They in turn can train the variety of community level workers mentioned above. In this way the necessary knowledge and skill can be disseminated to a wider population. Community workers will have to aim to create a sense of agency and control in the community, that they can determine their own future and faith in collective efficacy. It is only by creating a strong sense of community, collective efficacy and confidence, that social capital can be increased, leading to a gain cycle (Hobfoll 1998) where trust, motivation and hope are re-established. Linking social capital where communities have access to power, decision making and resources are vital for building resilience. Negative post-war conditions such as fear, lack of trust and uncertainty must be addressed. Efforts must be directed at rebuilding social capital through community networks, relationships, responsibilities, roles and processes.

At the same time, the community workers have to work towards creating opportunity structures for education, vocational and skill training, and capacity building particularly for youth and income generating programmes. It is by establishing some economic stability, livelihood and access to resources that families and communities will regain their dignity, faith and hope. Improvement in mental health and psychosocial wellbeing motivates the population and enables increased participation in rehabilitation and development programmes.

Expressive methods

Artistic expression of emotions and trauma can be cathartic for individuals, groups and the community as a whole. Art, drama, storytelling, writing poetry or novels (testimony), singing, dancing, clay modelling, and sculpturing are very useful emotive methods in trauma therapy (Wilson and Drozdek 2004). The traumatized individual or group is able to externalize the traumatic experience through a medium and thereby handle and manipulate the working through outside without the associated internal distress. Children in particular, who are usually unable to express their thoughts or emotions verbally, will benefit from the above mentioned expressive methods and play therapy.

Community monuments that would help focus and express emotions after mass trauma have been called traumascapes (Tumarkin 2005). For example, a civil monument at Mullivaikal to all who died there (military, militant, civilian) by a sensitive sculptor and national ceremonies to be observed there annually as recommended by the LLRC (Commission of Inquiry 2011) would support reconciliation.

Traditional Coping Strategies

Indigenous coping strategies that have helped the local population to survive should be encouraged. Culturally mediated protective factors like rituals and ceremonies should be strengthened. In traditional cultures, funerals and anniversaries can be very powerful ways to help in grieving and finding comfort. Funeral rites like *eddu chelavu, anthyetty, andu thuvasam, thuvasam* and similar anniversary observance are powerful social mechanisms to

deal with grief and loss. The gathering together of relations, friends and the community is an important social process to share, work through and release deep emotions, define and come to terms with what has happened and finally integrate the traumatic experience into social reality.

In addition to funerals, religious and temple rites, cultural festivals, dramas, musical concerts, exhibitions and other programs, meetings and social gatherings provide the opportunity for people to discuss, construct meaning, share and assimilate traumatic events. In the context of active warfare, these rituals are not possible or may be improperly performed; thus, the trauma is never fully accepted or put to rest, as in the cases of "disappearances" where there is no finality about death (Sivayokan 2011). Patricia Lawrence (1999) has brought out the psychosocial value of the traditional oracle practice of "*vakuu choluthal"* in Batticaloa*,* particularly in cases of disappearances, where the families are told what has happened to the disappeared person in a socially supportive environment. In cases of detention by the security forces the relatives may take vows (*nethi kadan)* at Temples to various Gods which they will fulfill if the person is released. The practice of *Thuukkukkaavadi,* a propitiatory ritual involving hanging from hooks, have increased dramatically after the war and maybe especially useful after detention and torture (Derges 2013). After resettlement, *Kovalan Koothu (a popular folk drama)* was performed all over the Vanni with large attendances and community participation. In the traditional folk form of *Opari* (lament), recent experiences and losses from the Vanni war was incorporated in to community grief performances (Duran 2011). Religious festivals, folk singing and dancing as well as leisure activities like sports can be ways of meeting, finding support and expressing emotions. *Koothu* (Jeyasankar 2011), other dramatic forms, *laments,* poetry, writings and drawing should be encouraged and promoted.

Ideally the social processes should work to promote feelings of belonging and participation, where the group is able to give meaning to what has happened, adapt to the new situation, and determine their future. It is noteworthy that the worldwide panel of trauma experts referred to earlier (Hobfoll and Watson et al 2007) also identified restoring connectedness, social support and a sense of collective efficacy as essential elements in interventions after mass trauma. Cultural rituals and practices are well suited to do just that (see Box 2).

Box 2 Healing Effects of Cultural Rituals

- Purges, purifies and heals physical and psychological wounds of war
- Establishes a supportive and caring milieu, communal participation
- Strengthens continuity of culture, meaning and hope
- Creates solidity, integration, social cohesion, group identity
- Restores **communality**, relationships, networks, interpersonal bonding
- Accesses familiar childhood associations, spiritual resources

Teaching of the culturally familiar relaxation exercises like *jappa, dhikir, anna pana sati, rosaries or yoga* (see Box 3) to families, large groups in the community and as part of the curricula in schools can be both preventive and promotes of well-being. Their traditional

approaches can produce the calming, sense of collective efficacy, social and cultural connectedness that the trauma experts recommended (Hobfoll and Watson et al, 2007). Although these techniques do no formal psychotherapy, they may accomplish what psychotherapy attempts to do by releasing cultural and spiritual restorative processes and mobilize social support.

Box 3 Cultural Relaxation Techniques

(Can be done individually, as a family, group and/or community)

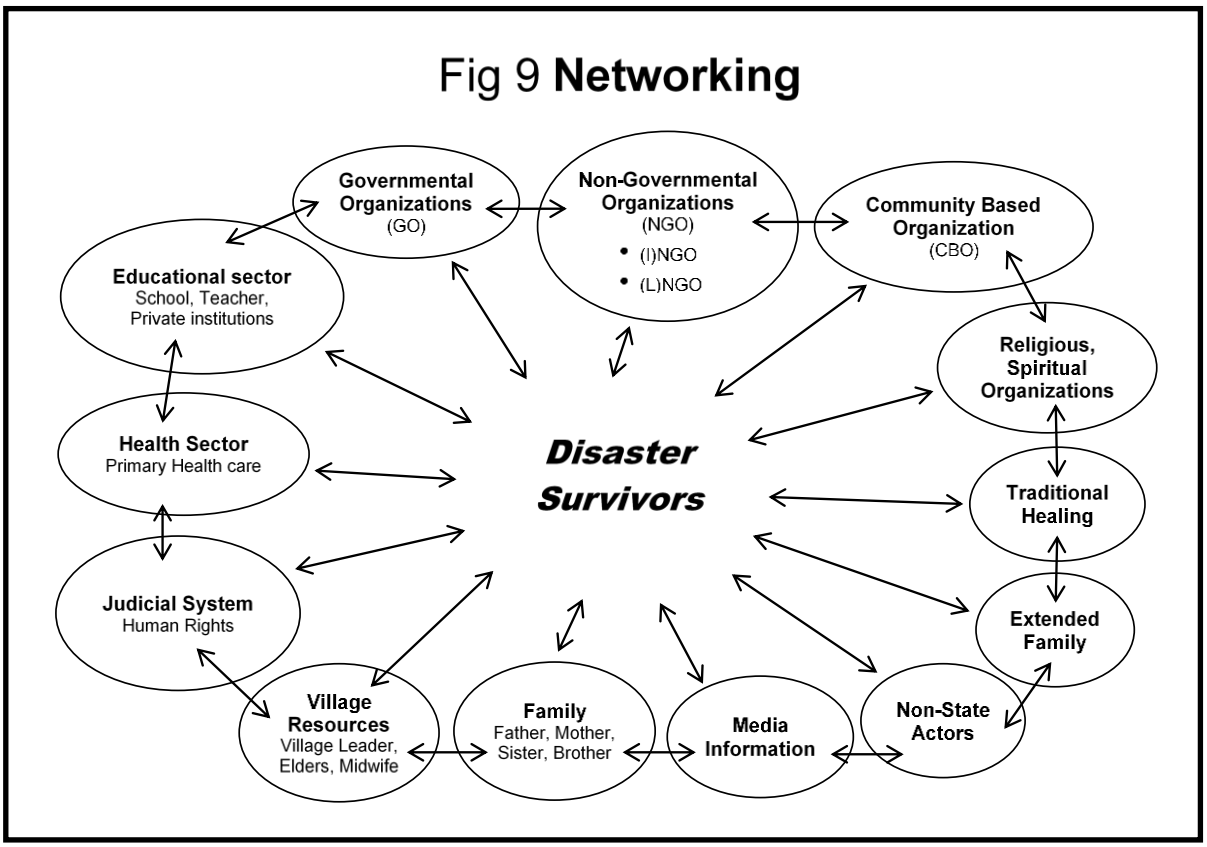
- **Regular Repetition of Words:**
  Hindu- *Jappa: Pranava mantra, 'OM'*
  Buddhist- *Pirit* or chanting: *Buddhang Saranang Gachchami*;
  Islam- *Dhikir, Tasbih: Subhanallah*
  Catholic Christians- *Rosary, prayer beads: the Jesus prayer (Jesus Christ have mercy on me)*
  Scientific- T.M., Benson's Relaxation response
- **Breathing exercises**: *Pranayamam, Anapana Sati* or mindful breathing
- **Muscular Relaxation**: *Shanthi or Sava Asana*, Mindful body awareness, Tai Chi
- **Meditation**: *Dhyanam*, Contemplation, *Samadhi, Vipassana*
- **Massage:** *Aurvedic* or *Siddha* oil massage

Psychosocial Rehabilitation

Attempts can be made to rebuild social networks and sense of community by encouraging and facilitating formation of organizations (e.g. for widows), rural societies (CBO's), schools and other groupings and promote inter-sectorial cooperation (Cullen and Whiteford 2001, Silove, Steel et al. 2006, Inter-Agency Standing Committee (IASC) 2007, Psychosocial Assessment of Development and Humanitarian Interventions (PADHI) 2009). Rehabilitation programmes should include education, vocational training, income generating projects, loans and housing that is tailored to the needs of the survivors and post disaster situation. Close liaison, co-operation, collaboration and networking with Governmental and NGO's involved in relief, rehabilitation, reconstruction and development work will be very productive (**Fig. 9)**. The network can be used to refer needy survivors for socio-economic and rehabilitation assistance.

What needs to be stressed here is that such a design includes due consideration for the psychological processes that promote individual, family and social healing, recovery and integration. It is important that programmes take into account the wishes of the local population concerned, that they are given active and deciding roles rather than dependent, 'victims' roles, to promote full participation and thus their eventual psychological recovery. Emergent self-help groups and local leadership should be encouraged to resume traditional and habitual patterns of behaviour, re-establish social networks and community functioning at the grass root level (Raphael 1986). Local skills and resources must be utilized so the

community gains a sense of accomplishment and fulfilment in the recovery process. In rebuilding community resilience it is important to promote the reestablishment of trust between members of the community and social institutions in order to strengthen hope for the future and a sense of collective efficacy.



Prevention

Preventive medicine uses large scale public health measures to protect populations and eradicate or mitigate causative agents. Tragically, much of the deaths and destruction caused by natural disasters can be avoided. This is even truer for human-caused (or technological) disasters and war. In many cases of natural disasters, poor and excluded communities were located in vulnerable areas, warnings were not issued or followed, or plans were forgotten. In the heat of battle, none of the protagonists maintained maps of where they laid landmines as they are expected to do by international convention, making it so much harder for demining and safe civilian resettlement. Wars and conflict can be prevented and psychosocial well-being ensured by appropriate conflict resolution mechanisms, equitable access to resources, power sharing arrangements, social justice and respect for human and social rights (Psychosocial Assessment of Development and Humanitarian Interventions (PADHI) 2009). Techniques such as torture and disappearances violating basic human rights cause long-term sequelae in individuals, families and communities (Doney 1998, Somasundaram 2008, Sivayokan 2011) which can be prevented if international conventions, humanitarian law and treaties are observed.

It is worthwhile planning beforehand to prevent or mitigate the impact of disasters at the community and family levels. There should be regional and international mechanisms to protect – civilians in times of conflict and/or when powerful leaders and states overstep boundaries of good governance and observation of basic rights. Increasing powers to the UN security council and general assembly to intervene with sanctions and peace keeping forces, International Conventions and Court and the principles of Right to Protect (R2P) (Evans 2007, Evans 2008) are promising developments. In the long term, there is a need to create a "culture of peace" by social peace building (Large 1997). WHO has developed the concept of using **Health as a Bridge for Peace** (HBP). The overall objectives of the HBP included the development of a specific sensibility that the planning and implementation of any health program must be compatible with the framework of international human rights principles and of international humanitarian law.

As health professionals we must not remain silent, we need to consider the ethics and take principled stand for victims and society (Armenian 1989, Zwi and Ugalde 1989) as Rajani Thiranagama did and paid the supreme price and Murali Vallipuranathan did for the Vanni IDP's. The Medical Profession has a powerful and persuasive voice. Particularly, if we can sensibly raise one consistent voice for peace. Reports, documentation and publications are avenues for the medical profession to raise awareness. Or, in our day to day dealings and contacts, we can take principled stands on issues and express our concerns; for example, on such issues as disappearances, child abuse, domestic violence and torture. Another area of intervention, both for prevention and reconciliation is at the national level by influencing policy making, rehabilitation and international aid programmes.

The UNICEF Education for Conflict Resolution will be a very effective programme for introduction into schools (Wijeyasekera 1996). The UNICEF (United Nations Children's Fund (UNICEF) 1999) developed *"peace education as the process of promoting the knowledge, skills, attitudes and values needed to bring about behaviour changes that will enable children, youth and adults to prevent conflict and violence, both overt and structural; to resolve conflict peacefully; and to create the conditions conducive to peace, whether at an intrapersonal, interpersonal, intergroup, national or international level."* Their publication edited by Bush & Saltarelli (2000), "*The Two Faces of Education in Ethnic Conflict"* is a powerful critique of the way education can be an aggravating factor in ethnic conflict and how it can be used more positively for solving such problems.

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