Stress in the Indian Armed Forces: how true and what to do?

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INTRODUCTION

Stress among the Indian Armed Forces has been a topic of discussion in the lay press, among civil society, and the political classes over the last decade, often leading to considerable concern for the military leadership. Alleged increases in the rates of suicide, fratricide, stress related physical disorders, psychiatric illnesses, and substance use have been quoted in the lay press and these figures were viewed with concern by the law makers. Military responses that some of these figures could be exaggerated or misrepresented were viewed with scepticism by the general public. Does the available epidemiological data support the contention of a stress epidemic in the Armed Forces? Various social measures to deal with stress of soldiering have been implemented and efforts to improve the psychological health of troops have been undertaken in recent times. How effective have these measures been? In this background it is proposed to review the available literature on the current concepts of stress, evaluation methodologies, epidemiological trends of stress related disorders among soldiers, stress manifestations and the availed coping strategies.

CONCEPTUALISING STRESS

The word stress is derived from the Latin word “stringi”, which means, “to be drawn tight”. Stress can be studied under a stimulus based paradigm, where certain conditions otherwise called “stressors”, like competition, challenges, workload, heat and cold and time pressure cause a stress reaction. Stress can also be studied under a response-based paradigm, which defines it as the pattern of responses otherwise called “strains”, which can be physiological, behavioural, cognitive, and affective that result from exposure to a stressor. Hans Selye’s general adaptation syndrome (GAS) model defined stress as a nonspecific, conventional response of the body to any demand made on it. He described the reaction of body under three stages namely alarm stage, resistance stage and exhaustion stage.¹ In general, stress improves

performance till an individually determined tolerance limit is reached, when exhaustion sets in and impairs performance. Stress is also classified as acute and chronic. Acute stress is sudden in onset, severe in degree and typically seen in service environment while in combat or while facing a personal catastrophe. Chronic stress on the other hand is insidious in onset, moderate in severity and represented in the service environment in the form of frequent transfers, denial of promotions and familial problems as a result of single parenting. Whatever be the type of stress, the trick is not stress avoidance but stress management for improved performance at the individual and the organisational level.

MEASURING STRESS

Stressors can be physical, physiological and psychological. Holmes and Rahe, two psychiatrists of the United States Navy conceptualised life change units (LCU) to measure chronic psychological stress. Based on their work, they allotted points to events experienced by most in their life span. For example the psychological weight of the death of a spouse was considered as 100 LCUs and a cumulative score was derived based on a person’s experience. The life events questionnaire constructed by Holmes and Rahe² and Paykel³ are the most commonly used instruments in the western world. In view of the cultural bias imposed by the western scales, one of the researchers developed a scale of 52 items and standardised it on 110 normal people from Delhi.⁴ The presumptive stressful life events scale (PSLES) developed in 1984 is a scale of 51 items drawn from the social readjustment rating scale and standardised on a sample of 200 adult subjects from Punjab.⁵ The PSLES has limited utility in service personnel drawn from various parts of the country who face unique experiences like fighting against enemies and terrorists and moving across geographical areas frequently and at short notice. To measure the life change units in Indian soldiers, a standardised stress scale known as the AFMC life events scale was developed in 2001, which rightly commemorates the institution, where it was developed.⁶

STRESS MANIFESTATIONS

Combat stress manifests as acute stress reaction, adjustment disorder and post traumatic stress disorder (PTSD). The consequences of chronic stress can be in the form of physical and psychological symptoms like headaches, bodyaches, tiredness,

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reduced sleep or appetite, and lethargy. Chronic stress may also manifest as psychosomatic disorders or psychiatric illnesses.

Evaluation of 601 polytrauma patients at one of the service hospitals revealed incidence of PTSD as 24.3%.⁷ However, no standardised scale for PTSD was used in this study. A series of 140 limb fracture patients at a service hospital reported significantly higher scores on general health questionnaire, Michigan alcoholism screening test, Carroll rating scale for depression, impact of events scale, and fatigue scale.⁸ The limb fracture patients also had a high prevalence of alcohol dependence/abuse and depressive disorders. The above were hospital based cross-sectional studies done on in patients and cannot be generalised to soldiers in the field. In a second set of studies, a researcher reported that troops deployed in counter insurgency operations (CI Ops) showed higher and significant signs of stress indicators such as use of alcohol, unfavourable response to tasks, diminished efficiency, frustration, maladjustment, tension, isolation and depression.⁹ Standardised scales were not used in this study. Another study in this set assessed stress and job satisfaction of soldiers in CI Ops using the Taylor's manifest anxiety scale and security/insecurity inventory developed earlier.¹⁰ Use of standardised scales in a study showed high psychiatric morbidity, depression and alcoholism in soldiers in low intensity conflict (LIC), but the study lacked a control group.¹¹ A third set of studies reported the effects of soldiering and terrorism on children of Armed Forces personal. One such study on 16 children injured in a terrorist attack, found that five suffered acute stress reaction of which three recovered with crisis intervention while two suffered persistent scholastic backwardness on review after one year.¹² A study published in this issue assessed behavioural problems of 150 children of service personal in a field area and compared them with equal number of children from a peace area.¹³ Interesting findings in this study were that the soldiers from the field and peace areas did not differ significantly in life events past year (LEP) and life events life time (LELT) on the AFMC life events scale. Though the authors reported scores

above cut-off in 23.3% children on the child behaviour check list, they did not find any significant increase in the behavioural problems among children of personal posted in field areas. This can be attributed to the successful implementation of the rotation policy between field and peace, which the Indian Army adopts for its soldiers. All the above discussed studies were cross-sectional. A longitudinal follow up of Army personal engaged in CI Ops with a self made personal questionnaire, multidimensional fatigue inventory, perceived stress questionnaire, PEN inventory, AFMC life events questionnaire, general health questionnaire, state-trait anxiety inventory, Carroll rating scale for depression, Michigan alcoholism screening test and Impact of events scale for two years with all scales being administered at six monthly intervals, found significant increases in general and fatigue and certain other parameters during the period of service in CI Ops.¹⁴

Data from annual health reports does not show any significant increase in the decadal trends of three psychosomatic and life style disorders, namely ischemic heart disease (IHD), essential hypertension (EHT), and obesity during the previous decade. There is no significant increasing trend discernible in the invalidment rates due to mental disorders and injuries during the same period either.¹⁵

COPING WITH STRESS

Soldiering is stressful and evidence exists regarding the stress consequences on Indian soldiers. However there is no evidence to suggest a stress epidemic in the Indian Armed Forces nor is there any evidence of increasing stress related illnesses over the last decade. Reports in lay press on suicides and fratricides tend to be sensationalised and fail to report the relative low rates of suicide in the Armed Forces compared with matching samples of civilian population. How are the Armed forces managing stress at the organisational level? A flurry of welfare measures (Table) unveiled in the last decade seem to have had an effect in

Table Measures in the Indian Armed Forces to deal with combat stress.

- Liberalised leave policy including provision to avail full casual leave at one go.
- Increased provision of free warrants to home town from field areas to twice a year.
- Thrust on provision of maximum government family accommodation in peace areas by completion of married accommodation projects (MAP).
- Enhanced officer-soldier interaction.
- Establishment of Rest and Recoup Centres in operational areas.
- Improved financial condition following last pay revision.
- Significant enhancement of hardship related allowances.
- Establishment of educational institutions for the wards of the soldier under Army Welfare Education Society.
- Recognition of various technical trades by collaboration with various Universities.
- Establishment of placement cells at regimental centres for better post retirement prospects.
- Modification of pay distribution method by direct collaboration with banks.
- Establishment of effective and faster grievance redressal by establishing Armed Forces Tribunals.
- Establishment of railway booking centres even at forward areas.
- Measures to make online train reservation at unit level obviating the use of warrants/concession forms.
- Creation of pool of trained counsellors at unit level by ongoing training programmes for RT JCOs and NCOs at psychiatric centres.

containing the exceptionally high level of stress faced by the Indian soldier due to ongoing counter insurgency. Is this enough and is everything perfect? Indian studies in this field have been sporadic and scanty when compared to the large number of studies from Vietnam, Somalia, Kosovo and the ongoing operations in Iraq and Afghanistan, which are freely available in indexed psychiatric and combat journals or as service published monographs. Service psychiatry in the Indian Armed Forces is largely hospital based and this is reflected in the large number of studies on patient populations which cannot be generalised to the soldier in the field. Most combat psychiatric research work from the USA and Europe is done by psychiatrists posted in field units. It is perhaps time to experiment with a few field psychiatric units in the operational commands of the Indian Army. This experiment with field psychiatric units can be combined with centrally directed integrated research projects to improve yield in combat psychiatry.

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