Abstract

Sri Lanka Army soldiers have been exposed to extensive combat stress during the 30 year long civil war period. Posttraumatic stress disorder (PTSD) is known to be a major mental health consequence of combat stress.

The present study was undertaken for estimation of the prevalence of combat related PTSD in Sri Lanka Army, to identify the risk factors and to explore the effectiveness and feasibility of mindfulness meditation (Ana Pana Sathi) as a low cost treatment method for PTSD.

PTSD Check List military version (PCL-M) was translated into Sinhala and validated using a sample of 49 PTSD patients and 51 non PTSD persons. The desired cut off point for validated translation is 44. Sensitivity and specificity is 0.959 (95% CI 0.904 - 1.01) and 0.922 (95% CI 0.849 - 0.996) respectively. The area under the curve is 0.989 (95% CI 0.976 - 1.002). Reliability measured by Cronbach's alpha is 0.944 for the total scale and 0.812, 0.869 and 0.895 for three DSM-IV sub scales (Re-experiencing, Avoidance/Numbing and Hyperarousal) respectively.

A cross sectional descriptive study was conducted among a community based sample of 1784 combat military personnel chosen by multi stage random sampling. Data was collected using validated PCL-M and self administered questionnaire. Non response rate was 8.6% and incomplete data accounted for 2.5%. The sample was predominantly younger (70% below 30 years), below the rank of corporal (87%) and educated up to GCE O/L or less (75%). Point prevalence of combat related PTSD among currently serving combat military personnel of Sri Lanka Army is 10.5% (95% CI 9.02 - 12.04%).

A case control study using a sample of 167 cases and 334 controls identified in the prevalence study was carried out. In a multivariate analysis, lower educational level (OR = 2.065, 95% CI 1.225-3.482), age less than 20 years at the first battle exposure (OR = 2.062, 95% CI 1.245-3.415), having a history of psychiatric illness (OR = 4.834, 95% CI 1.120-20.872), reporting a family history of psychiatric illness (OR = 2.858, 95% CI 1.392-5.866) and history of childhood mental abuse (OR = 6.329, 95% CI 2.616-15.313) were identified as risk factors for combat related PTSD.

A quasi experimental study was conducted with 32 PTSD patients in the intervention group and 40 in the control group. Dropout rate was 38%. Significant reduction of overall symptoms ($p< 0.000$), re-experiencing symptoms ($p< 0.020$) and hyperarousal symptoms ($p< 0.000$) was found when compared to pharmacological treatment alone and there was no significant difference in the success rate of controlling combat related PTSD. Mindfulness meditation is not perceived as a feasible treatment method for combat related PTSD at domestic and camp environment. It can be effectively implemented as institutional group therapy.

Since the estimated burden of combat related PTSD is high outreach screening programmes for early detection of undetected cases and expansion of existing mental health services to cater the anticipated swelling of PTSD case load should be undertaken. Psychological rehabilitation programmes and a compensation scheme for victims of psychological war trauma should be implemented. The risk factors identified should be considered in future recruitment and deployment. Institution based group therapy of mindfulness meditation could be effectively utilized as a low cost, culturally accepted adjuvant therapy for pharmacological treatment for reduction of PTSD symptoms.

Key words: Combat related PTSD, Sri Lanka Army, Mindfulness meditation, PCL-M