

Snips from the journals

Recent research from Sri Lanka

Shehan Williams and Thilini Rajapakse

Mental health of Special Forces personnel deployed in battle (1)

A population-based descriptive study was carried out to compare the mental health problems of Special Forces with regular forces in the Sri Lanka Navy (SLN) deployed in combat areas for at least 1 year. Participants were selected by simple random sampling. The outcome measures were common mental disorder measured using the General Health Questionnaire, PTSD, fatigue, multiple physical symptoms and hazardous alcohol use.

Overall exposure to potentially traumatic events was high in both groups, with Special Forces experiencing significantly more traumatic events. More than 80% of the Special Forces had experiences of discharging weapons in direct combat, engaging in combat with enemy vessels and seeing the dead or wounded. Special Forces had significantly less common mental disorders, fatigue and fair or poor general health than regular forces. Fair or poor general health (21.1%) and fatigue (18.4%) were the commonest problems in the regular forces. Hazardous drinking was the commonest mental health problem among the Special Forces (17%). Prevalence of PTSD was 1.9% in the Special Forces and 2.9% among the regular forces. Exposure to traumatic events and problems with family life were identified as risk factors. Elite troops suffered less negative mental health consequences than regular forces despite higher combat exposure. Comradeship and unit cohesion protected Special Forces from negative mental health outcome of combat.

The premilinary findings warrant an in depth study of the factors that lead to psychological morbidity in service personnel.

Prevalence of war-related mental health conditions and association with displacement status in postwar Jaffna District, Sri Lanka (2)

A cross sectional multistage cluster sample survey was carried among 1517 Jaffna District households including 2 internally displaced persons camps. All participants were interviewed privately. The Hopkins Symptoms Checklist-25 (HSCL-25) and the Harvard Trauma Questionnaire (HTQ) were used to measure the following outcomes in the participants: symptoms of anxiety, depression and posttraumatic stress disorder (PTSD).

A majority of the participants were Tamil and female, with a mean age of 40 years. One or more trauma events were experience by 68% of the participants. The overall prevalence of PTSD, depression and anxiety were 7.0%, 22.2% and 32.6% respectively. The prevalence of PTSD, depression and anxiety symptoms were higher among currently displaced persons. According to multivariable analysis, female gender, older age and trauma exposure were associated with a significantly higher level of psychiatric symptoms.

This is an important study because it examines the prevalence of psychiatric symptoms among a population that was exposed to a war situation for many years. There were several limitations to this study. Prevalence estimates were from survey instruments and they cannot represent a clinical diagnosis without clinical interviews and a measure of psychosocial dysfunction. Given the cross sectional nature of the study, it is not possible to comment on causal relationships. Since there are no baseline prevalence rates available for Sri Lanka, it was not possible to compare the rates for Jaffna reported in this study, with rates in the rest of the country.

Delayed psychological morbidity associated with snakebite envenoming (3)

This cross sectional descriptive study looked at somatic symptoms, depressive disorder, post-traumatic stress disorder (PTSD), and impairment in functioning, among snakebite victims at least a year after discharge from hospital.

The study had qualitative and quantitative arms. In the quantitative arm, 88 persons who had systemic envenoming following snakebite from the North Central Province of Sri Lanka were randomly identified from an established research database and interviewed 12 to 48 months (mean 30) after the incident. Persons with no history of snakebite, matched for age, sex, geograpical location and occupation, acted as controls. A modified version of the Beck Depression Inventory, Post-Traumatic Stress Symptom Scale, Hopkins Somatic Symptoms Checklist, Sheehan Disability Inventory and a structured questionnaire were administered. In the qualitative arm, focus group discussions among snakebite victims explored common somatic symptoms attributed to envenoming.

Snakebite victims (cases) had more symptoms than controls as measured by the modified Beck Depression Scale (mean 19.1 vs. 14.4; p<0.001) and Hopkins Symptoms Checklist (mean 38.9 vs. 28.2; p<0.001).

Forty eight (54%) cases met criteria for depressive disorder compared to 13 (15%) controls. Nineteen (21.6%) cases also met criteria for PTSD. Twenty four (27%) claimed that the snakebite caused a negative change in their employment; nine (10.2%) had stopped working and 15 (17%) claimed residual physical disability. The themes identified in the qualitative arm included blindness, tooth decay, body aches, headaches, tiredness and weakness.

It is interesting to note that snake bite can lead to longer term psychological morbidity. The limitation in the assessment, due to the lack of a clinical diagnosis based on ICD or DSM criteria has to be acknowledged.

Prevalence of major depressive episode among patients with pre-dialysis chronic kidney disease (4)

The objective of this study was to ascertain the prevalence of depression among pre-dialysis chronic kidney disease (CKD) patients. A cross-sectional study was carried out using the Structured Clinical Interview for DSM IV (SCID) to detect major depressive episode. The study was carried out in a nephrology outpatient clinic in Sri Lanka. Every fifth patient with CKD diagnosed according to the K/DQOI of the National Kidney Foundation of USA criteria stages 2-5, who not undergoing dialysis, was recruited (n=140).

Eighty-nine patients (63.6%) were male. The mean age was 57.9 years (SD = 10.4). Only 41 (29.3%) were in paid employment. The percentage of patients in CKD stages 2, 3, 4, and 5 were 2.9%, 19.6%, 51.4%, and 25%, respectively. Only three patients had diabetes. One hundred and five patients were on treatment for hypertension. The overall prevalence of a major depressive episode among the patients was 27.9%. Among males, the prevalence was 27% (95% CI 17.6-36.3) and among the females, 29.4% (95% CI 16.5-42.4). Age, gender, income, employment status, and education were not associated with depression. The only significant variable associated with depression was the patient's understanding of the prognosis.

The rate of depression diagnosed using a structured clinical interview in this study, was lower than that reported with the use of screening instruments. The only significant variable associated with depression was patient's understanding of prognosis, and future studies should aim to identify risk factors for depression among patients with kidney disease.

Signs and symptoms of acute mania: a factor analysis (5)

This is a factor analytic study looking at clustering of symptoms of acute mania. The sample included 131 patients consecutively admitted to an acute psychiatry unit over a period of one year. It included 76 (58%) males. The mean age was 44.05 years (SD = 15.6). Patients met International Classification of Diseases-10 (ICD-10) clinical diagnostic criteria for a manic episode. Patients with a diagnosis of mixed bipolar affective disorder were excluded. Participants were evaluated using the Young Mania Rating Scale (YMRS). Exploratory factor analysis (principal component analysis) was carried out and factors with an eigenvalue > 1 were retained. The significance level for interpretation of factor loadings was 0.40.

Unrotated principal component analysis extracted five factors. These five factors explained 65.36% of the total variance. Oblique rotation extracted 3 factors. Factor 1 corresponding to 'irritable mania' had significant loadings of irritability, increased motor activity/energy and disruptive aggressive behaviour. Factor 2 corresponding to 'elated mania' had significant loadings of elevated mood, language abnormalities/thought disorder, increased sexual interest and poor insight. Factor 3 corresponding to 'psychotic mania' had significant loadings of abnormalities in thought content, appearance, poor sleep and speech abnormalities.

This original work carried out in Sri Lankan patients with acute mania support the multidimensional nature of manic symptoms.

Prevalence of externalizing behavior problems in Sri Lankan preschool children: birth, childhood, and sociodemographic risk factors (6)

The objective of this study was to examine the prevalence and associated factors of externalizing behaviours among a sample of community preschool children in Sri Lanka. Maternal ratings of child behavior were obtained from a community-based sample of 1,117 children aged 4-6 years, using the Child Behaviour Assessment Instrument (CBAI). This instrument has been previously developed and validated for the assessment of externalizing behavior of preschool children in Sri Lanka.

According to the study findings, the prevalence of externalizing behavior in the sample was 19.2% (95% CI 17.5-20.9%), a rate that lies towards the upper limit of the prevalence range reported in other developing countries. Externalizing behavior was found to be significantly associated with the following factors: male gender, having been breast fed for less than 3 months, low socio-economic status, and living with only one parent.

This study provides important data regarding the prevalence of externalizing behavioural problems among preschool children in Sri Lanka. Limitations include the fact that the study relies on maternal reports of child behavior. Also no causative associations could be made, due to the cross sectional nature of this study.

Reference

- Hanwella R, de Silva V. Mental health of Special Forces personnel deployed in battle. Soc Psychiatry Psychiatr Epidemiol. 2011 Oct 29 <u>CrossRef</u>
- Hussain F, Anderson M, Cardozo BL, Becknell K, Blanton C, Araki D, Vithana EK. Prevalence of warrelated mental health conditions and association with displacement status in postwar Jaffna District, Sri Lanka. JAMA 2011;306(5):522-531. CrossRef
- Williams SS, Wijesinghe CA, Jayamanne SF, Buckley NA, Dawson AH, Lalloo DG, de Silva HJ. Delayed psychological morbidity associated with snakebite envenoming. PLoS Negl Trop Dis. 2011 Aug;5(8):e1255. CrossRef
- Sumanathissa M, De Silva VA, Hanwella R. Prevalence of major depressive episode among patients with predialysis chronic kidney disease. Int J Psychiat Med. 2011;41(1):47-56. <u>CrossRef</u>
- Hanwella R, de Silva VA. Signs and symptoms of acute mania: a factor analysis. BMC Psychiatry. 2011 Aug 19;11:137 <u>CrossRef</u>
- Samarakkody D, Fernando D, McClure R, Perera H, De Silva H. Prevalence of externalizing behavior problems in Sri Lankan preschool children: birth, childhood, and sociodemographic risk factors. Soc Psychiatry Psychiatr Epidemiol. 2011 Apr 8. <u>CrossRef</u>

Shehan Williams Senior Lecturer in Psychiatry, Department of Psychiatry, Faculty of Medicine, University of Kelaniya, Sri Lanka **Thilini Rajapakse** Lecturer, Department of Psychiatry, Faculty of Medicine, University of Peradeniya, Sri Lanka