ABSTRACT

Introduction: Burnout is one of the leading psychological problems that effects negatively on occupational mental wellbeing. Mental health literature on the military revealed that the military personnel are also a more vulnerable group to experience burnout. There is a significant possibility of accumulation of the known burnout correlates within Sri Lankan Army context over the past decade. Sri Lanka Army is recognized as the focal asset regarding national security, resilience in disaster situations, national development and main defending strength to counteract any upcoming threat to the nation. Therefore, mental wellbeing of Army personnel is very crucial.

Objectives: To describe the prevalence and correlates of burnout and coping strategies for burnout among military personnel of Sri Lanka Army and to describe the prevailing organizational climate regarding burnout preventive services/strengths and weaknesses of Sri Lanka Army.

Methodology: Study was conducted in four components.

A Validation study was conducted to adapt, translate and validate Maslach Burnout Inventory-General Survey (MBI-GS) to Sinhala language among 229 army personnel selected by systematic sampling method, who attended Army hospital Colombo for routine medical fitness examination. Consensual, criterion and construct validity was assessed to evaluate validity and internal consistency was assessed by calculating Cronbach's alpha to evaluate reliability. Exploratory factor analysis and confirmatory factor analysis was conducted to assess construct validity. Criterion validity was established against diagnosis of consultant psychiatrist. SPSS 21 version and LISREL 8.80 software were used in analysis.

Then, a cross sectional study was conducted among 1692 Army personnel selected using multistage sampling method to describe the socio-demographic and occupational factor profile, prevalence and correlates of burnout. Validated MBI-GS (Sinhala version) and Brief COPE were included as sections in a self-administered questionnaire to achieve the objective. Prevalence was calculated using cut off point obtained from validation study. Univariate analysis was conducted using Chi-square (χ^2) and Fisher's exact test to assess associations of burnout correlates.

A case control study was conducted among 386 cases and 766 controls selected from same study population of cross sectional study to determine the risk factors of burnout. Bivariate analysis followed by binary logistic regression analysis was done to identify risk factors.

A qualitative study was conducted through in-depth interviews with 16 senior experienced military personnel, to describe prevailing services/strengths and a weakness for burnout prevention in Sri Lanka Army. Inductive thematic analysis was conducted to identify thematic areas.

Results: During the consensual validity assessment of the validation study, item twelve of original MBI-GS was suggested to be removing from the translated MBI-GS. Two factors emerged instead of the three factors of the original inventory when the items were loaded with Varimax Rotation technique in the principal factor analysis. This was confirmed with confirmatory factor analysis since the "Modified two factor model with deleted items six and twelve, plus added correlate error terms" was identified as the best fitting model with the given best fitting indices. Area under the curve was 0.970 of the Receiver operating curve developed to assess criterion validity for this modified tool. Sensitivity and specificity were found to be 92.3% and 87.9% respectively at the cutoff point of 28.5. All scales demonstrated internal consistency with Cronbach's alpha value more than 0.7.

Non-respondent and incomplete data percentage was 6.02% (102) of the cross sectional study. Mean age of study population was 30.7 (SD± 6.23) years. Female participant percentage was 9.4% (n=149). Percentage of married participants was 61.2% (973). More than half of participants (n=813, 51.1%) were Lance corporals and Corporals in their ranks. Prevalence of probable burnout among military personnel of Sri Lanka Army was estimated as 28% (95% CI-23.13-32.87) and adjusted prevalence of burnout was 23.2% (95% CI 18.9%-27.5%).

In the case control study following were identified as risk factors to develop burnout; age of 30 years or below (OR=2.291, 95% CI=1.479-3.548), having no additional income (OR=2.313, 95% CI=1.361-3.930), not having saved money in bank accounts (OR=1.788, 95% CI=1.126-2.841), having a dependent who is bed bound (OR=2.779, 95% CI=1.276-6.053), having transport difficulties (OR=3.330, 95% CI=1.966-5.639), past history of psychiatric treatment (OR=3.942, 95% CI=1.197-12.987), family history of psychiatric disease (OR=3.608, 95% CI=1.216-10.704), frustration about life (OR=19.471,

95% CI=11.680-32.457), being a daily smoker (OR=1.959, 95% CI=1.316-2.916), and practicing dysfunctional coping strategies (OR=1.148, 95% CI=1.116-1.181).

Satisfied on the support available for their children (OR=0.297, 95% CI=0.182-0.483), received special training relevant to current tasks (OR=0.584, 95% CI=0.403-0.845), able to get leave timely (OR=0.340, 95% CI=0.204-0.569) and practicing problem focused coping strategies (OR=0.912, 95% CI=0.877-0.948) were identified as protective factors.

Leadership factor, cohesion, role of senior Non Commissioned officers, problems in current recruitment, training and career development, identification methods of psychological issues, welfare and financial mismanagement and importance of army preventive mental health services were identified as the thematic area through the qualitative study.

Conclusion: High prevalence of burnout among Army personnel and compacted determinants of burnout within working environment would adversely influence on achievement of organizational goals of Sri Lanka Army and in turn on the security of the country. Conducting outreach screening sessions and mental health promotion programmes, consideration of identified risk factors in recruitment and deployment, capacity building and reorientation of preventive mental health services are highly recommended.

Key words: Burnout, MBI-GS, prevalence, correlates, psycho-social safety climate, military, SL Army