

PRIMARY RESEARCH

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# Multiple physical symptoms in a military population: a cross-sectional study

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## Abstract

**Background:** Medically unexplained symptoms have been reported among both civilians and military personnel exposed to combat. A large number of military personnel deployed to the Gulf War in 1991 reported non-specific symptoms. These symptoms did not constitute a clearly defined syndrome. Post-traumatic stress disorder (PTSD) and to a lesser degree exposure to combat are associated with physical symptoms.

**Methods:** This is a cross-sectional study of representative samples of Sri Lanka Navy Special Forces and regular forces deployed in combat areas continuously during a 1-year period. Multiple physical symptoms were elicited using a checklist of 53 symptoms. Cases were defined as individuals with ten or more symptoms. Symptoms of common mental disorder were identified using the General Health Questionnaire 12 (GHQ-12). PTSD was diagnosed using the 17-item National Centre for PTSD checklist civilian version.

**Results:** Prevalence of multiple physical symptoms was 10.4% (95% CI 8.11–12.75). Prevalence was significantly less in the Special Forces (5.79%) than in the regular forces (13.35%). The mean number of symptoms reported by those who met the criteria for PTSD was 12.19 (SD 10.58), GHQ caseness 7.87 (SD 7.57) and those without these conditions 2.84 (SD 3.63). After adjusting for socio-demographic and service variables, 'thought I might be killed', 'coming under small arms fire', and 'coming under mortar, missile and artillery fire' remained significant. Multiple physical symptoms were associated with functional impairment and poor perceived general health.

**Conclusions:** Prevalence of multiple physical symptoms was significantly lower in the Special Forces despite high exposure to potentially traumatic events. More multiple physical symptoms were reported by personnel with PTSD and common mental disorders. Multiple physical symptoms were associated with functional impairment.

**Keywords:** Trauma, Stress, Stress disorders, Post-traumatic, Military personnel, Special forces, War, Sri Lanka

## Background

Medically unexplained symptoms (MUS) have been reported among both civilians and military personnel exposed to combat. These symptoms can be classified into different syndromes such as somatoform disorder, chronic fatigue syndrome, and conversion disorder. There is considerable overlap between these syndromes [1]. Symptoms such as abdominal distension, headache, and weakness are present in many such syndromes. The term, medically unexplained symptoms, is used when there is no objective evidence of an illness despite subjective complaints of symptoms. Only a small proportion, about one

in four, seeks medical attention for their symptoms [2]. Factors that precipitate seeking medical help include perceived seriousness, functional impairment, and psychological distress [1].

There is overlap between multiple physical symptoms and psychological morbidity [1,3]. Physical symptoms are associated particularly with anxiety and mood disorders. The likelihood of a psychiatric disorder increases with increasing numbers of physical symptoms [4]. In people with MUS, psychological morbidity increases risk of medical consultations and functional impairment [1,4].

A large number of military personnel deployed to the Gulf War in 1991 reported non-specific symptoms [5,6]. These symptoms did not constitute a clearly defined syndrome. Initially, these symptoms were attributed to physical conditions such as exposure to chemicals or

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