### **Review article**

# Are we complacent about mental health issues of the military in Sri Lanka?

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#### **Abstract**

Until 2009 the Sri Lankan military faced a protracted war of varying intensity for thirty years. In the latter part of the conflict over 5000 military personnel died and over 20,000 were left wounded and disabled. Evidence from the West indicates that post traumatic stress disorder (PTSD), depression, alcohol related disorders, traumatic brain injuries, violence,

sociopathic behaviour and suicide are major mental health consequences of war, in the military. Studies about the Sri Lankan military are more limited, and show varying results.

Key words: Sri Lankan military, PTSD, depression

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#### Introduction

For almost three decades the Sri Lankan military was engaged in an armed conflict with a terrorist organisation. The most severe effects of the war were observed during 2006 to 2009, where over 5000 died and over were 20,000 injured. While post war mental health issues within the army have not been comprehensively studied in Sri Lanka, anecdotal evidence suggests that suicides, absenteeism and incidents of violence committed by service personnel are associated with war experiences. Hence, the objective of this article is to present an overview of the current literature on mental health outcomes following exposure to war and trauma in the military.

# Mental health issues in relation to war and trauma in Western armies

Most evidence on mental health of the military is from Western countries. Nevertheless, as military service personnel are thought to have similar values and health concerns across cultures, it is worth revisiting literature from the West regarding mental health issues in the military (1, 2).

Traumatic combat experiences may include injury, death of a team member, near death experience, witnessing of a killing or torturing, and killing of an enemy or civilian (3). Recent studies on combatants show that post traumatic stress disorder (PTSD), depression, traumatic brain injury (TBI) and alcohol abuse as major mental health issues associated with exposure to battle trauma (4, 5).

#### **Post-Traumatic Stress Disorder**

Combat exposure is reported to be the commonest predictor for PTSD in the military (6). Reported PTSD prevalence rates among veterans are 2-17%, 2.7% and 4-6% in the US, Canada and UK respectively (7). In the Australian military, prevalence of PTSD ranged from 6.2

to 9.7% (8). It was observed that sustaining injury in a battle increased the odds of developing PTSD by four fold and the risk further increased if the injuries were incurred in a hostile environment (9). The frequency and intensity of direct combat exposure appear to be strong predictors of PTSD (10, 11). The battle which was fought by the Sri Lankan soldiers was considered to be of high intensity and long duration (12). Moreover, the soldiers sustained injuries in extremely hostile circumstances (12). Hence, a high prevalence of PTSD could be expected in the Sri Lankan military.

#### Alcohol abuse

Among war veterans, alcohol abuse is reported more commonly than PTSD (13). A cross sectional Canadian study which investigated 2779 soldiers deployed in Afghanistan reported that 31% of them had emotional, alcohol or family problems (14). A US study showed that one out of five soldiers on active duty in the air force drank excessively (15). Fear et al reported that 67% of men and 49% of women in the British regular Armed Force were engaged in hazardous drinking (16). But the findings of the Mental Health Prevalence and Wellbeing Study of the Australian Defence Force are in contrast to other studies, with significantly lower reported prevalence of alcohol related disorders of 8.8% and 5.6% in males and females respectively (8). The military police reports on the Sri Lanka army suggest that offenses committed in relation to inebriation are common in Sri Lanka. Further, the number of patients with alcohol related problems presenting to the psychiatric clinic of the army hospital has increased in recent years. However, the exact extent and nature of this problem in the Sri Lankan military is not known, due to a paucity of studies.

### **Depressive disorder**

Depression is known to be a common disorder in the military, affecting service members of all ages (17). Geographic separation from friends and family, combat

exposure, obligated tours of duty, scrutiny from command, loss of privacy, and physical demands are some of the unique military stressors that may contribute to the development of depression (18). High level of combat exposure and prolonged deployment are particularly associated with depression (19). Thomas et al reported a prevalence of depression in the military ranging from 11.5% to 16% (20). During the war Sri Lankan soldiers were incessantly exposed to combat and deployed in the battlefield for years, with prolonged separation from family and friends. In addition, the soldiers had to march long distances in difficult terrains with heavy loads on their backs (12), indicative of high physical demand. Thus, the burden of depression among the military in this country warrants a careful examination, but again little or no empirical evidence is available for Sri Lanka.

### Traumatic brain injury

A sizable proportion of the US, Afghan and Iraq combat veterans have experienced Traumatic Brain Injury (TBI) during their period of deployment, implying its indelible stance in the war (21). It is reported that 70 to 90% of cases with TBI are classified as Mild Traumatic Brain Injury (mTBI) (21). The prevalence of mTBI among UK soldiers deployed in Afghanistan was extrapolated to range from 4.4% to 9.5%, which is comparatively lower than rates among US combatants (22). Evidence also indicates that PTSD and depression co-occur significantly with mTBI (23). The Sri Lankan army combatants were exposed to large numbers of artillery, mortar and landmines (12). Some Sri Lankan soldiers attribute their unexplained physical symptoms to the blast waves experienced on the battlefield. Research is required to explore this further, and there maybe many undetected cases of mTBIs and post-concussion syndromes in the Sri Lankan military.

### Mental health issues and social functioning

The length of deployment and combat experience have been shown to correlate with antisocial behaviour (24). A UK based study showed that 12.6% of soldiers after active duties in combat zones displayed violence (27). It has been shown that violent behaviour is closely associated with alcohol misuse and PTSD, even after controlling for pre-enlistment antisocial behaviour, sociodemographic and military factors (27, 28). It has also been shown that Traumatic Brain Injury and depression are strong contributors to aggression and violence (29, 30). The literature reiterates that aggressive behaviour following exposure to battle is associated with increased the risk of partner violence and disrupted quality of marital life (31, 32, 33). In addition, combat exposure and post traumatic stress symptoms have been shown to be associated with poor occupational performance and frequent absenteeism (34).

## Suicide and deliberate self-harm

In the recent years, suicidal behavior has become a major issue among combatants (35). Suicide is considered to

be the second most common cause of death in the US armed forces with an annual suicide rate of 9 to 15 per 100,000 (36). A recent study by Pindel et al reported that the lifetime prevalence of attempted suicide and self-harm in the UK armed forces was 5.6% – higher than previously suggested (37). An Australian study reported that 0.4% of the military attempted to take their own lives whereas 3.9% had suicidal ideas and 1.1% had plans to end their lives (8). Depression, alcohol and PTSD related problems are associated with suicidal or self harm behaviour (38, 39, 40). Suicides and deliberate self-harm in Sri Lankan soldiers are reported, however the exact nature of the problem is not known.

# Mental health issues in the Sri Lanka military forces and comparison with other Asian countries

A study done in 2010 estimated that 10.5% of soldiers in the Sri Lanka Army had PTSD (47). Authors of this study did not consider functional impairment as a necessary criterion for diagnosing PTSD. This was the only available research study on mental health issues in the Sri Lankan army.

More evidence is available about the Sri Lankan navy. A descriptive study done on navy personnel in Sri Lanka concluded that elite forces suffered less negative mental health consequences than the regular forces; this difference was attributed to comradeship and unit cohesion (44). The same study demonstrated that poor general health (21.1%), and fatigue (18.4%) were the commonest problems observed among the troops of the regular forces and these complaints were significantly associated with traumatic events and family issues. However, the prevalence of PTSD among sailors exposed to battle was observed to be low, being 1.9% and 2.9% in the Special Forces and regular forces respectively. While use of alcohol among Sri Lankan navy sailors was not associated with exposure to battle, hazardous use of alcohol and binge drinking was reported in 16.69% and 14.01% respectively (45). A study done in the Sri Lanka Air Force showed that 50% of airmen referred for psychiatry treatment had adjustment and stress related disorders (46).

Other Asian countries have reported similar findings. India and Pakistan frequently engage in limited-combat and occasional major incursions. According to Chaudhury and Singh, mental health issues of the Indian military were directly related to the duration of the stay and the nature of the conflict (41). Depression and alcohol related problems were the most prevalent mental health issues encountered by the Indian army combatants (41). In the Pakistan army the commonest mental health issue was depression and this was strongly associated with low socio-economic status and poor social support (42). Depression has also become the most prevalent psychiatric disorder among armies in Southeast Asian countries such as Taiwan (43).

#### Conclusion

Sri Lanka is recuperating from a protracted civil war. War related mental health issues are common in the military and this is associated with consequences such as self-harm, violent behaviour and problems in employment and relationships. While these phenomena are seen in the Sri Lankan Army, evidence is limited about the nature, extent and factors associated with mental health problems in the military in this country. Increased clinician awareness in order to identify mental health issues in war veterans, and further research to investigate the associations between war exposure and mental health problems, are needed in Sri Lanka.

#### **Declaration of interest**

None declared

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