Phoenix AUSTRALIA

Specific Populations and Trauma Types
Military and ex-military personnel

This *Military and ex-military personnel* information sheet addresses background issues and provides presentation, assessment and treatment recommendations for practitioners working with military and ex-military personnel.

Background issues

An understanding of the military experience and military culture is important for establishing a therapeutic relationship with military and ex-military personnel. Two useful resources for practitioners who are new to working with this group, are included in the recommended reading below (Lane & Wallace, 2020; Department of Veterans' Affairs *At Ease* website).

Military personnel are confronted with a range of experiences that may contribute to posttraumatic stress disorder (PTSD), including both military-specific events and traumas that also affect the general population. Events may include war, peace-keeping and peace-monitoring missions, border protection, counter-terrorism and surveillance activities, disaster and humanitarian relief, or support to national security tasks, as well as training accidents and other lifetime traumatic events experienced in either their personal or work lives. Research with the Australian Defence Force (ADF) suggests that the most common traumatic event experienced by serving members is seeing someone badly injured or killed, or unexpectedly seeing a dead body. In terms of developing PTSD, experiences such as increased combat exposure, fear of being seriously injured or killed, discharging a weapon, witnessing someone being wounded or killed,[1] witnessing atrocities and accidentally injuring or killing another person, in addition to other interpersonal traumas such as rape, domestic violence, being stalked, and being kidnapped or held captive, pose the most significant risk.[2]

During deployment, it is not uncommon for military personnel to experience multiple traumatic events. Military deployment frequently involves exposure to real or threatened death and serious physical injury that can lead to PTSD. Extent of exposures, length of deployment, time between deployments, and repeated deployments are established risk factors for developing PTSD.[3,2,4] Furthermore, the nature of traumatic events experienced on deployment can challenge fundamental beliefs about the self, the world, and humanity. For example, traumatic events may involve the death of civilians and destruction of communities on a scale that is often unimaginable and for which the veteran has had little preparation. Notably, modern conflicts are often not between conventional military forces, but rather between intra-state forces and non-state actors, such as insurgents, terrorists, and criminal networks. Involvement in

these types of conflicts results in the additional stress of attempting to distinguish between combatants and civilians, as well as exposure to non-conventional tactics such as suicide attacks and improvised explosive devices. Conflict zones have also become increasingly urbanised, resulting in widespread devastation to local infrastructure, and military personnel may be required to deal with humanitarian crises and large populations of displaced civilians.

Military personnel themselves may have committed acts of violence that, with the benefit of hindsight or emotional distance from the event, may be deemed to be atrocities – such experiences may shatter previously held beliefs about the self. Due to the significant advances in the range and lethality of weaponry, and emergence of new technologies such as cyber warfare and unmanned aerial weaponry, some military personnel may have been involved in instigating military action from remote locations. Increasingly, as the armed services are involved in humanitarian and peacekeeping duties, military personnel can be exposed to traumatic situations which, without posing any immediate threat to themselves, involve witnessing considerable human suffering with the rules of engagement preventing intervention to protect non-combatants. It was initially thought that peacekeepers had low rates of exposure to traumatic stressors. Several recent studies, however, have indicated that peacekeeping missions may present a range of unique stressors that can have a significant psychological impact on deployed personnel.[5] For example, in one study, peacekeepers reported negative deployment experiences including knowing that many of the war criminals were not arrested, seeing children who were the victims of war, seeing civilians in despair, seeing the physical devastation of the country's infrastructure and environment, and knowing that there was a lack of supplies for civilians.[6] In addition, peacekeepers often experience frustrations associated with peacekeeping duties, such as restrictive rules of engagement.[7] A 2013 study of the mental and physical health of a sample of Australia's peacekeepers deployed on seven United Nations-sanctioned peacekeeping missions between 1989 and 2002, concluded that peacekeeping missions are associated with substantial risk of subsequent mental health problems.[8] The rates of PTSD were substantially higher than those found among currently serving personnel or in other deployment studies, and participants reported high levels of exposure to the threat of injury or death, seeing dead bodies, witnessing degradation and misery, and hearing of a friend or co-worker being injured or killed.

Regardless of the nature of the deployment, military personnel may be confronted with situations or need to make decisions which are characterised by moral ambiguity. There is increasing recognition of 'moral injury' – a term used to encompass the psychological, social and spiritual impacts of exposure to traumatic events that contravene or betray one's moral beliefs.[9] Such exposures frequently occur throughout long periods in demanding operational contexts with high levels of threat and hostile physical environment.[10]

It is important to consider that not all military-related trauma is deployment related, and acknowledge the potential impact of non-deployment stressors on veteran and military mental health. Non-deployment stressors are inherent to daily life, such as training exercises conducted under extreme conditions with dangerous machinery, and exposure to sexual trauma.[11] As military careers progress, the likelihood of experiencing multiple traumatic events increases, placing personnel at higher risk of the effects of cumulative trauma exposure.[10] Notably, research with specific military and veteran sub-populations, including peacekeepers[12] and personnel exposed to sexual trauma,[13] demonstrate significant levels of PTSD, even in the absence of combat exposure.

An understanding of the psychological underpinnings of the serving member or veteran's initial presentation and a preparedness to give sufficient time to establish a trusting relationship will be

immeasurably helpful. Given the nature of traumatic events experienced by many veterans, they may anticipate negative evaluation on the part of the clinician. To work effectively with military personnel, the clinician must demonstrate a willingness to listen and the capacity to tolerate the details of traumatic experiences whilst maintaining a positive regard for the individual throughout. It is also important to consider post-trauma risk factors, including subsequent life stressors and post-deployment support (both within and outside military environments), as these factors are particularly important during the adjustment period during transition to civilian life.

In addition to risk of exposure to traumatic events, military and veteran populations are characterised by several additional factors that may influence the development of PTSD. These include physical risk factors. Prospective studies, particularly of military populations, provide evidence about the emerging biological abnormalities that precede a PTSD diagnosis.[4] For example, there is evidence in cross-sectional genetic and epigenetic studies that increased inflammatory markers are associated with increased PTSD severity.[14] Commonly cited pre-trauma risk factors include age, gender, race, education, and military status.[1] Aspects such as service branch, rank, quality of leadership, social support, and unit cohesion may influence the risk of PTSD,[15] with key social connections between serving personnel an important moderator of vulnerability post-deployment.[16] Further, military recruits have increased rates of childhood physical abuse, sexual abuse and neglect, as well as high rates of family dysfunction compared with community averages, and these factors have been found by several researchers to be salient in the development of PTSD in this population.[17,18,19,20] On the other hand, a 2015 Australian study of personnel entering the ADF found that prior trauma had a relatively small impact on mental health symptoms within the first 12 months. However, an important difference in this study was that the most common prior traumas reported were not related to childhood abuse or neglect, but rather witnessing injury to others, being threatened oneself, and experiencing natural disaster.[21]

Importantly, the practitioner needs to be aware of pre-military history, as it is likely to influence the establishment of a therapeutic relationship as well as treatment planning. Further, military and veteran populations face unique adjustment difficulties when transitioning to, and from military service, including potential disruptions to identity and increased risk for mental health issues.[10]

A recent study of the psychological, physical, and psychosocial wellbeing of ADF personnel during the first five years of transition from full-time military service highlighted increasing rates of psychological morbidity.[22] Almost one in two transitioned personnel was estimated to meet the diagnostic criteria for a 12-month mental disorder and more than half of these had at least one comorbid mental disorder. The research also indicated that those with a mental disorder had a greater probability of transitioning from military service, and that emerging psychological distress was likely to be a significant driver of an individual's decision to leave the military.

Lastly, compared to civilians, military populations report higher rates of a range of physical symptoms including musculoskeletal conditions and chronic pain, symptoms which are implicated in the development of PTSD, depression and anxiety.[23,24,25] Physical symptoms, which have been shown to have a bi-directional relationship with PTSD symptoms,[26] are linked to combat exposure and reflect part of the traumatic stress response.[27,28] Considered collectively, these mental and physical factors can have a synergistic effect on functional impairment in military roles, which may contribute to worsening of mental health issues in veteran and military populations.[29]

Presentation

Prevalence of PTSD in military and veteran populations varies across nations and is impacted by factors such as trauma-related exposure, length of deployment, military rank, as well as methodological variances in sampling strategies and psychometrics.[30] From recent research on ADF personnel, the 12-month estimated rates of PTSD is eight per cent for current serving members, and this more than doubles to over 17 per cent in those who have transitioned from full-time service (17.7%).[22] Research on the impact of specific conflicts on ADF personnel is limited, however, the available evidence suggests that the point prevalence of PTSD is estimated to be around 12 per cent in Vietnam veterans and five per cent in Gulf War veterans.[2,31,32] Similar findings have been reported in deployed and non-deployed US veteran populations, with prevalence estimates of approximately eight per cent lifetime and five per cent current PTSD,[33] which are slightly higher than estimates for civilian populations,[34,35] and research conducted across a range of conflicts indicates that PTSD affects between two and 17 per cent of US veterans at any given time.[36]

The finding that PTSD is higher among ex-service populations than in active serving cohorts[37,38] has been attributed to factors such as the additional stress faced by veterans as they transition from military to civilian life (e.g., finding employment, accommodation, budgeting, forming civilian relationships), or perhaps due to personnel with substantial PTSD symptomology being more likely to leave active duty, thus resulting in higher rates of PTSD in ex-service populations.[10] Despite the heterogeneity in PTSD prevalence, there is sufficient research to conclude that, in the majority of Western countries[10]:

- PTSD remains one of the most common mental disorders in both military and veteran populations
- PTSD rates increase in proportion to potentially traumatic event exposure (including combat)
- Prevalence is higher among discharged veterans than among active duty military.

The presentation of symptoms for military personnel tends to be somewhat different to other traumatic stress victims. The association between the trauma exposures and the workplace means PTSD often has an indirect presentation in these cases. For example, the individual's difficulties may manifest as increasing conflict with senior personnel over a variety of operational and disciplinary issues. Furthermore, the individual may have had a prolonged period of symptomatic distress that they have attempted to minimise and deny. The general sense of camaraderie and collegial support in the military often assists the individual in maintaining a façade of functioning. A failed promotion or a disciplinary charge may be a consequence of the individual's increasingly disorganised behaviour, and often becomes the focal point around which an individual's distress is manifest. The indirect manifestation of the individual's distress can delay appropriate assessment and diagnosis.

The clinical manifestation of an individual's distress in these situations can occur in a variety of ways. For example:

- the individual may initially present with a prolonged period of numbing and increasing interpersonal insensitivity. This can manifest as inappropriate management of junior personnel or conflict with superiors.
- interpersonal conflict with family and, in particular, violent outbursts, is another indirect manifestation that may first be brought to the attention of welfare services from a secondary victim, such as the spouse.

- comorbid alcohol abuse is not an uncommon presentation where the individual attempts to self-medicate. The associated interpersonal and work-related difficulties may lead to others in the person's social or work networks being aware of the difficulties prior to the individual themselves.
- physical complaints may be the primary presenting problem. Veterans with PTSD tend to have more physical symptoms and higher symptom severity than veterans without PTSD.[39] It may be that given the stigma surrounding mental health problems, expressing distress in the form of somatic symptoms is perceived to be more acceptable than showing signs of PTSD.
- an intense pattern of distress may emerge in response to a recent traumatic event, even one of apparently minor severity. The recent event, however, may have some particular similarity to a prior exposure – perhaps a more severe event that played an important role in the initial disruption of the individual's reactivity to stress. Hence, the longitudinal pattern of symptoms needs to be assessed, as well as the acute disorganisation in response to recent exposures.
- individuals who leave the military may first present some time after their discharge. The loss of identity and support through the structure of the organisation that has provided the *raison d'etre* for the individual's functioning can lead to the progressive emergence of PTSD symptoms, including increasing and distressing recollections and nightmares.

Assessment

Systematic screening has an important role in identifying PTSD in military personnel who are either engaged in repeated high-risk exposures or who have had a recent deployment or major event which carries a significant risk of PTSD.[40] Recent research suggests that it may also play a valuable role at pre-deployment.[41] However, it should be recognised that the emergence of symptoms is often delayed, pointing to the value of an annual health assessment above and beyond an initial screening process. The administration of screening questionnaires should only be seen as a guide to a more systematic diagnostic assessment by a trained clinician for anyone who screens as being at risk.

A range of psychometric instruments have been trialled in military services for monitoring the emergence of symptoms. Given the issues about under reporting, there may be some value in using lower thresholds to determine referral for a clinical assessment. Any screening process should also regularly interview a fixed proportion of people who are symptomatic to remove the stigma of referral for follow-up.

Measures of trauma exposure and mental health symptoms need to be flexibly applied in regards to the nature of the exposure. The Posttraumatic Checklist for DSM-5 (PCL-5[42]) is a 20-item self-report measure that corresponds to the DSM-5 symptom criteria for PTSD. The PCL-5 is frequently used across a range of settings for a variety of purposes, including monitoring symptom change as well as screening for provisional diagnosis of PTSD. Several revisions were made to the PCL when updating it from DSM-IV to DSM-5. The PCL for DSM-IV[43] specified three separate versions: PCL-M (military), PCL-C (civilian) and PCL-S (specific), however, there are no corresponding PCL-M or PCL-C versions in the PCL-5. Whilst there is only one version of the PCL-5, there are three different formats of the measure: (a) Criterion A component excluded; (b) Criterion A component included; (c) Life Events Checklist for DSM-5 (LEC-5) and extended Criterion A component included. The PCL-5 rating scale ranges from 0-4 for each symptom, and rating scale descriptors are the same: "Not at all", "A little bit", "Moderately", "Quite a bit", and "Extremely", resulting in a total symptom severity score between 0 and 80. Initial research suggested a PCL-5 cut-off score between 31-33 as indicative of probable PTSD, whilst validation studies recommend a variety of cut-off scores ranging between 28 and 37,[42,44] or alternatively via following the DSM-5 diagnostic algorithm for PTSD using items that correspond to each DSM criteria. The findings of validation studies indicate that the

optimal cut-off score depends on the context, the population, as well as the gold-standard criterion instrument, reiterating the need for flexible application of measures of trauma exposure and mental health symptoms. The most recent version of the PCL assesses the twenty DSM-5 PTSD symptoms.

Individuals with a work-related disability are often placed in a difficult conflict about seeking assistance because this can lead to significant discrimination and disadvantage in the workplace. This is a recognised difficulty when presenting to occupational health services and has particular relevance for military populations, where an adverse health assessment may make the person unsuitable for deployment or continued employment. The potential stigma of mental health problems as a sign of weakness in the 'warrior culture' of the military can also be an important barrier to care. A 2015 Australian study investigated the access, use and attitudes/beliefs towards mental health services of Regular ADF personnel (n= 52,500) and Transitioned ADF personnel (n= 24,932) in the first years transitioning from full-time military service.[45] Self-reported rates of help-seeking were quite high, with 75 per cent of transitioned and regular ADF personnel with a probable current psychological disorder seeking care within the prior 12 months; however, due to substantial attrition at each help-seeking stage, approximately 25 per cent of personnel were estimated to have received evidence-based care. For both Transitioned and Regular ADF, the most common reasons for not engaging in help-seeking included perceived ability to self-manage (76.7% and 80.1%, respectively), ability to function effectively (80.6% and 82.4%), and feeling afraid to ask (42.6% and 44.9%). Whilst 34.9 per cent and 37.4 per cent of Transitioned and Regular ADF did not report any stigmas, approximately one third (33.6% and 30.0%, respectively) endorsed at least four stigmas, including: perceptions they would be subject to others losing confidence in them (40.0% and 44.6%); be seen as weak (28.8% and 31.3%); be treated differently (32.5% and 36.3%) and feel embarrassed (31.7% and 24.8%). The most commonly endorsed barriers to seeking help among Transitioned ADF were concerns about harm to career/career prospects (30.34%), and for Regular ADF, impact on deployability and career (47.38%).

Consideration of barriers to care relevant to military populations requires a high level of skill from the assessing clinician. It is important that supervisors who are familiar with the individual's normal disposition and capability have some awareness of the indirect manifestation of the effects of PTSD in the workplace so that appropriate referrals can occur. The health professional ideally should have access to personnel records (which may, for example, highlight absences or disciplinary measures for aggression or substance abuse) to assist in a clinical assessment.

The clinical presentation of military personnel and veterans infrequently occurs following the initial exposure to a single traumatic incident. The more typical scenario is where the individual breaks down after repeated experiences of a variety of traumatic incidents which entail varying degrees of a sense of personal threat, often combined with the witnessing of harm or death to others. The extent to which a specific incident is personalised through some identification with the event or the victim plays an important role in modifying the resilience and vulnerability of the individual. Military deployments that involve close personal contact with civilians (or even enemy personnel) carry a particular risk.

The available evidence suggests that prolonged exposure or repeated intense exposures over a period of time lead to an accumulated risk.[46,20,47,17] While there appears to be some relationship between multiple deployments and level of symptomatology, the intensity of trauma or combat exposure appears to be more important than the actual number of deployments in predicting mental health outcomes.[2] As a consequence, the recommendation regarding comprehensive assessment of the individual's trauma

history applies; the history obtained from military personnel should focus on the lifetime exposure, as well as the immediate antecedent event that may have prompted the presentation for treatment.

Treatment

The particular challenge with veteran and military populations is to implement treatment as early as possible. Using the principles of secondary prevention, this minimises the development of a series of secondary patterns of adaptation that in themselves can present a significant disadvantage. The systems of care that ensure early identification, such as screening and addressing stigmatisation in the workplace are of particular importance. Recognition of the value to a defence force of maintaining the skill base of highly trained personnel is an important priority in encouraging a general attitudinal change within these organisations. Significant experience in dealing with veteran and military populations is also an important matter for clinicians, because understanding the specific culture of military organisations can be central to the development of a positive therapeutic relationship with the person with PTSD.

Australian and international PTSD guidelines consistently indicate trauma-focussed cognitive behavioural therapies, such as cognitive processing therapy (CPT), prolonged exposure (PE), and Eye Movement Desensitisation and Reprocessing (EMDR), to be the gold-standard treatment for PTSD. However, in recent randomised clinical trials with military and ex-military personnel, direct comparisons of active treatments which include trauma-focussed and non-trauma focussed treatments (PE, CPT, present-centred therapy, sertraline, and transcendental meditation) have shown no significant difference in PTSD treatment outcomes.[48-52] Further, a number of clinical treatment trials, both pharmacological and psychological, with veteran populations from several counties (e.g., Australia, US, Canada), suggest a poorer treatment response among military personnel and veterans compared to civilian populations.[53,54] This is despite the only randomised controlled trial of psychological treatment for Australian veterans with PTSD indicating CPT to be highly effective in this population.[55] In a review of recent military-related PTSD randomised control trials, Steenkamp and colleagues conclude that managing military-related PTSD with a single course of monotherapy is of limited efficacy.[56] High comorbidity may be a contributing factor to poorer treatment response, with military-related PTSD associated with problematic anger, substance abuse, sleep disturbance, and emotional numbing.[57] There is mixed evidence surrounding whether pre-treatment comorbidities such as depression, guilt, anxiety, and dissociation are associated with poorer treatment response, however, recent research suggests it may be a combination of co-occurring risk indicators that best predict outcomes, rather than single predictors considered as isolated factors.[58] More modest outcomes in a number of these studies may be due to characteristics of the veterans themselves (male gender, nature and duration of traumatic experiences, chronicity of PTSD, high rate of comorbidity), the less rigorous treatment interventions generally used with this population, or potentially complicating factors relating to veterans' compensation, pensions, and other entitlements. All these factors are often associated with more modest responses to treatment.

In view of poorer treatment outcomes for those with military-related PTSD, modifications to standardised treatment may be needed in clinical practice to individualise treatment and specific presentations.

Specific consideration of the following points may be helpful.

- Treatment planning needs to take into consideration the multiplicity of traumatic exposures that military personnel have had to deal with and the consequent multiple 'triggers' or trauma reminders. Also, the

somatic symptoms and medical comorbidities that are related to the underlying neurobiological dysregulation are not targeted by current treatments.[4]

- Many symptoms of PTSD, including hypervigilance, exaggerated startle response, anger, and emotional numbing, can be adaptive and even life-saving in combat situations. Addressing these issues can be of particular relevance to those individuals who have had a prolonged period of service where these responses may have become ingrained and represent significant dysregulation of nonspecific threat appraisal systems.[59]
- The existence of comorbid substance abuse is a frequent therapeutic challenge. This should be dealt with alongside the initial control of an individual's symptomatic distress. This approach takes account of the fact that frequent substance abuse has often been a form of self-medication that the individual has used to address their difficulties. Integrated treatment of both PTSD and substance abuse should be considered with the proviso that the trauma-focussed component of PTSD treatment does not commence until the person demonstrates the capacity to manage distress without recourse to substance abuse. Information on PTSD and strategies to deal with PTSD symptoms should be provided, as PTSD symptoms may worsen during substance abuse treatment due to acute withdrawal or loss of substance use as a coping mechanism.
- Due to the nature of veterans' compensation systems, some people may perceive a vested interest in maintaining symptomatology until all proceedings associated with their claim have been completed. Therapists are advised to address this issue with the person before initiating treatment. An open discussion of the pros and cons of maintaining symptomatology can often be useful.

Considerable challenges exist in delivering evidence-based treatments to military and veteran populations, including[10]:

- engagement and retention in treatment
- absence of defined benchmarks for assessing treatment progress and non-response
- clinician-related barriers, including, reluctance by some to work with veteran populations; capability/willingness and treatment fidelity – to work effectively with military and veteran populations; the need for an understanding of military culture and a capacity to tolerate details of traumatic experiences whilst maintaining unconditional positive regard
- absence of empirical guidance to support clinical decision-making when patients have an atypical and/or complex presentation, psychosocial problems, and/or does not respond to first or second line treatments.

In regards to treatment engagement, engaging in help-seeking behaviours can be experienced as antithetical to the warrior ethos inherent to military systems that emphasise self-reliance and strength when responding to adversity. Further, engaging in PTSD treatment may have a negative effect on career trajectory, as certain mental health problems and medication use can result in being assessed as unfit for deployment. However, others concerns, such as being treated differently by leadership or fellow unit members may or may not be justified, yet the broad issue of stigma underlying the military culture, beliefs, and behaviour around help-seeking is considerably relevant.[60]

A particular challenge when working with currently serving military personnel is the management of exposure to further stressors in the workplace during the immediate aftermath of treatment. In general, it is important to remove the external threat and triggers to the individual's distress. A model of sensitisation and kindling (whereby repeated experiences of traumatic incidents result in increased responsivity and

progressively more severe reactions over time) is a valuable theoretical construct to inform any cognitive behavioural management.

Observational studies suggest the challenge of determining recommendations for future duties – and particularly fitness to deploy following treatment for PTSD – should be based on an individual's residual pattern of arousability, degree of recovery, and general adaptation. If a significant degree of triggered distress remains, it is probable that further exposures will exacerbate the individual's symptoms.[61,62] In these instances, it is best to minimise the probability of such exposures and recommend alternative duties. Other factors to consider include current circumstances (especially support networks within and outside the military), duration and severity of the most recent episode, prior risk factors (such as adverse childhood, other traumatic exposures, prior psychiatric history), and the person's wishes – whether they want to redeploy. The key issue is duty of care. The ADF has a health directive that an individual cannot return to combat role unless they have been symptom-free for 12 months.

Source and contributors

The *Military and ex-military personnel* information sheet was initially developed by Phoenix Australia in collaboration with Professor Mark Creamer, Clinical Psychologist, Department of Psychiatry, University of Melbourne; Professor Alexander McFarlane, Director, Centre for Traumatic Stress Studies, University of Adelaide; and Dr Duncan Wallace, Psychiatrist, Australian Defence Force Centre for Mental Health. It has been updated by Ms Nicole Sadler and Dr Ros Lethbridge from Phoenix Australia.

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Recommended reading

Department of Veterans' Affairs *At Ease* website https://at-ease.dva.gov.au/professionals/client-resources/mental-health-advice-book/11-understanding-veteran-experience (Accessed February 2020)

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