

organisations such as the Red Cross and Red Crescent may help overcome some of these difficulties.

References

Al-Maskari, F., Shah, S. M., Al-Sharhan, R., *et al* (2011) Prevalence of depression and suicidal behaviors among male migrant workers in United Arab Emirates. *Journal of Immigrant Minority Health*, 13, 1027–1032.

Saraga, M., Gholam-Rezaee, M. & Preisig, M. (2013) Symptoms, comorbidity, and clinical course of depression in immigrants: putting psychopathology in context. *Journal of Affective Disorders*, 151, 795–799.

Watters, C. (2002) Migration and mental health care in Europe: report of a preliminary mapping exercise. *Journal of Ethnic and Migration Studies*, 28, 102–107.

World Health Organization (2011) *Mental Health Atlas*. WHO.

Zahid, M. A., Fido, A. A., Alowaisi, R., *et al* (2002) Psychiatric morbidity among housemaids in Kuwait: the precipitating factors. *Annals of Saudi Medicine*, 22, 384–387.

Zahid, M. A., Fido, A. A., Alowaisi, R., *et al* (2003) Psychiatric morbidity among housemaids in Kuwait: III. Vulnerability factors. *International Journal of Social Psychiatry*, 49, 87–96.

Zahid, M. A., Fido, A. A., Razik, M. A., *et al* (2004) Psychiatric morbidity among housemaids in Kuwait: a. Prevalence of psychiatric disorders in the hospitalized group of housemaids. *Medical Principles and Practice*, 13, 249–254.

GUEST
EDITORIAL

What's so special about military veterans?

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The mental health of military veterans has been, and continues to be, a topic of heated political and journalistic debate. There is a well-documented impact of conflict upon the mental health of service personnel, and most nations have aimed to provide effective care for individuals who have fought for their country. However, as the three thematic papers in this issue demonstrate, the realities of service-related mental health are rather more complex than they initially appear.

The mental health of military veterans has been, and continues to be, a topic of heated political and journalistic debate. Because of the well-documented impact of conflict upon the mental health of service personnel (Hunt *et al*, 2014), most nations have, for wholly understandable reasons, aimed to provide effective care for individuals who have fought for their country. Thus the argument for nations providing services for the mental health of war veterans, whether arising out of gratitude or of moral duty, seems to be simple common sense.

However, as the three thematic papers in this issue demonstrate, the realities of service-related mental health are rather more complex than they initially appear. First, it seems that although one might expect the main burden of operational stress injuries to occur during or soon after deployment, while individuals are still serving, it appears that mental health problems may in fact be more common once personnel have left service, months or years later.

Secondly, most of the authors note that the link between deployment and poor mental health is less clear than might be expected. There is now considerable evidence that soldiers who have served

on peacekeeping (rather than combat) operations also experience traumatic stress-related disorders (Greenberg *et al*, 2008) and indeed that a significant proportion (about half) of post-traumatic stress disorder (PTSD) in the military is not related to deployment (Jones *et al*, 2013).

Thirdly, while not discussed in detail in the thematic papers in this issue, there is considerable evidence that pre-enlistment factors such as childhood adversity and sociodemographic factors significantly affect the risk of developing mental health problems during or after service. For instance, a UK study of post-deployment violence showed that pre-enlistment violent offending was the most influential risk factor (adjusted hazard ratio 3.85), whereas deployment itself was not an independent risk factor (MacManus *et al*, 2013).

Fourthly, while the debate about veterans' mental health often appears to centre on how to increase the scope, efficiency or availability of mental health services for veterans, there is considerable evidence that most veterans who suffer with mental health problems do not in fact seek any help at all for them. This lack of help-seeking seems to result both from a lack of recognition of the existence of mental health problems and from fears or concerns about the consequences of seeking help, which may be practical (e.g. regarding the impact of receiving treatment for a mental health problem on career prospects) or perceptual (e.g. regarding self-perception as a resilient person or the perceptions of others). Research has shown that these concerns are not in any way unique to the military and a reluctance to seek help seems just as common within the general population as among those who have served in the military.

Lastly, there seems to be a general consensus among researchers that the process of transition

out of the military may contribute in some way to the development of mental health problems. The reasons for this are less obvious but clearly transition out of the military is not directly a deployment issue; indeed, transition is about leaving the liability to be sent to a hostile area behind and settling into the somewhat safer civilian world.

The above five points are important because they all suggest veterans' mental health problems are not particularly related to either deployment or the traumatic experiences that service personnel may experience while deployed. Instead, they suggest a much more diverse, and complex, explanation for the *apparent* excess of mental health problems that veterans experience. The word 'apparent' is appropriate here because while there is some, although inconclusive, evidence that the prevalence of mental health disorders is raised in veterans compared with those still serving and the general (never-served) population, few (if any) studies have compared veterans with people who have worked in similarly hierarchical professions. If high-quality evidence were available about veterans from other hierarchical organisations that rely heavily on teams 'pulling together' in often uncertain and challenging environments (e.g. fire or police workers), it might emerge that these veterans too would have similar risks of post-service mental health difficulties. It might also be useful to examine how social factors (e.g. relationships with family and friends) influence post-employment mental health outcomes, given that we know that the quality and availability of social networks are of the utmost importance to mental health. For instance, a UK study showed that military veterans who continue to rely on service-related social networks (e.g. mixing with individuals who are still serving) fare much less well than those who form sustaining civilian networks (Hatch *et al*, 2013). It may be that veterans are not especially experienced in forming supportive bonds unless they are in the face of intense adversity, which, thankfully, while commonplace in the military, is not so in the wider community. If this were found to be true, then further work would be needed to know whether this social deficit was a result of pre-service factors or of military service itself.

So, on one hand it appears that, contrary to the popular public perception of the 'damaged war hero', veterans' mental health problems are not, in the main, particularly related to combat experiences. Instead, other factors, such as pre-enlistment vulnerabilities, difficulties in forming or using post-service social networks and a lack of appropriate help-seeking behaviours (not in any way solely a veterans' issue, however), seem important determinants of post-service mental health. On the other hand, there is an abundance of data showing that personnel exposed to traumatic events (e.g. combat troops, those taken hostage, the physically injured) do suffer more mental health problems than other military personnel. Indeed, some of the US data on this topic suggest that almost one-third of US combat troops suffer

from PTSD (Thomas *et al*, 2010). Additionally, particularly relevant to the US context, the issue of deployment-related mild traumatic brain injury (mTBI) appears inextricably linked to mental health disorders, with studies showing that a substantial proportion of personnel who report symptoms of mTBI also suffer with deployment-related mental health difficulties.

While on the face of it these two broad findings seem at odds with each other, in reality they only seem so because of the rather misplaced public view of what service life is about. The innumerable films and books about military life have propagated a misplaced belief that all military personnel frequently face overwhelming enemy forces and encounter tragedy or horror or some other 'story-worthy' challenge. Rarely do 'military stories' depict well-planned, successful missions, the mundaneness of life in main operating bases, the consistent challenges of being away from family for months on end or, indeed, the sense of humour, satisfaction, learning and personal 'growth' which deployment can generate. For instance, there is a growing, although not yet mature, literature on post-traumatic growth which suggests that even the most challenging of experiences can have positive outcomes (Dekel *et al*, 2011). To what extent deployment itself might lead to growth is still unclear, however.

Military service is not 'inevitably' bad for an individual's mental health. While some service personnel will undoubtedly suffer operational stress injuries, in the longer term others, even those who have experienced the most traumatic of deployment incidents, may experience improved, rather than degraded, resilience. When considering the mental health of veterans as a whole, given the diversity of the experience of military service, it is not at all surprising that some groups of military personnel are at higher risk of developing mental health disorders and other groups at considerably lower risk. Given the often challenging pre-service backgrounds of people who join the military, perhaps politicians and journalists should applaud the military for the overall highly reasonable state of mental health of their active-service forces. How much the apparent deterioration in mental state of individuals as they transition to veteran status is a return to their more vulnerable pre-enlistment state or a function of their military experiences is not yet clear. What is clear, however, is that it is certainly not all about deployment.

References

- Dekel, S., Mandl, C. & Solomon, Z. (2011) Shared and unique predictors of post-traumatic growth and distress. *Journal of Clinical Psychology*, 67, 241–252.
- Greenberg, N., Iversen, A., Hull, L., *et al* (2008) Getting a piece of the action: measures of post-traumatic stress in UK military peacekeepers. *Journal of the Royal Society of Medicine*, 101, 78–84.
- Hatch, S. L., Harvey, S. B., Dandeker, C., *et al* (2013) Life in and after the armed forces: social networks and mental health in the UK military. *Sociology of Health and Illness*, 35, 1045–1064.



Hunt, E. J. F., Wessely, S., Jones, N., *et al* (2014) The mental health of the UK armed forces: where facts meet fiction. *European Journal of Psychotrauma*, 5; doi 10.3402/ejpt.v5.23617

Jones, M., Sundin, J., Goodwin, L., *et al* (2013) What explains posttraumatic stress disorder (PTSD) in UK service personnel? Deployment or something else? *Psychological Medicine*, 43, 1703–1712.

MacManus, D., Dean, K., Jones, M., *et al* (2013) Violent offending by UK military personnel deployed to Iraq and Afghanistan: a data linkage cohort study. *Lancet*, 381, 907–917.

Thomas, J. L., Wilk, J. E., Riviere, L. A., *et al* (2010) Prevalence of mental health problems and functional impairment among active component and national guard soldiers 3 and 12 months following combat in Iraq. *Archives of General Psychiatry*, 67, 614–623.

THE MENTAL HEALTH OF MILITARY VETERANS

Veteran and military mental health: the Australian experience

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Australia has deployed over 25 000 personnel to recent conflicts in the Middle East and has been involved in peacekeeping missions. Australian veterans report elevated rates of mental health problems such as post-traumatic stress disorder, anxiety disorders, affective disorders and substance use disorders. Veteran healthcare is delivered through publicly funded services, as well as through private services, at primary, secondary and tertiary levels. Some of the challenges involve coordination of services for veterans transitioning from Defence to Veterans' Affairs, service delivery across a large continent and stigma inhibiting service-seeking. Initiatives have been introduced in screening and delivery of evidence-based treatments. While challenges remain, Australia has come a long way towards an integrated and comprehensive approach to veteran mental healthcare.

Australia has a long tradition of celebrating its military history, dating back to the Gallipoli campaign in the First World War, which took place shortly after federation. Despite the lack of military success in Gallipoli, the courage and mateship displayed by the Australian soldiers have become stuff of national legend (Stanley, 2002). Although a century has passed, this legend pervades modern Australian culture and is still, for many, synonymous with what it means 'to be an Australian'. As a result of this core identification with military conflicts, the Australian community advocates strongly for the support and care of their veterans, colloquially known as 'diggers'.

Since federation, Australian military personnel have served in both World Wars as well as in other major international conflicts, such as Korea, Vietnam and the Gulf. Australia has deployed over 25 000 personnel to recent conflicts in the Middle East, where it maintains a presence. In addition to combat roles, Australia has become a major player in international peacekeeping missions, including spearheading the United Nations mission in East

Timor, as well as humanitarian deployments both in Australia and overseas. This diversity of deployments means that 'contemporary veterans' (defined as having served since 1999) are likely to have participated in a combination of combat, peacekeeping and other deployments. They are also the largest cohort of Australian veterans, at an estimated 61 900 in 2013 and rising (Department of Veterans' Affairs, 2013a). In comparison, in 2013 surviving veterans of the Vietnam War and the Second World War numbered 46 000 and 58 200, respectively.

Mental health in Australian military and veteran populations

Several studies have investigated the mental health of Australian veterans, with most reporting substantial morbidity. Comprehensive studies of Australian Korean War veterans (Ikin *et al*, 2009), Vietnam veterans (O'Toole *et al*, 2009) and veterans from the first Gulf War (Ikin *et al*, 2004) have found significantly elevated rates of mental health problems such as post-traumatic stress disorder (PTSD), anxiety disorders, affective disorders and substance use disorders relative to non-deployed personnel and comparable civilian populations. This increased risk of mental health disorders is not restricted to combat deployments. A recently completed study of 1067 Australian Defence Force personnel deployed on one or more peacekeeping missions between 1991 and 2002, for example, revealed surprisingly high rates of mental disorder (Hawthorne *et al*, 2014). Prevalence rates for disorders such as PTSD, alcohol misuse, depression and anxiety were not only higher than among civilian comparators but also higher than those found following other Australian deployments.

While rates of mental disorder are higher in Australian veterans than among civilians, this is not the case for currently serving military personnel, among whom the overall rate is similar to that among civilians, although rates differ across disorders (McFarlane *et al*, 2011). Serving personnel were found to have higher 12-month prevalence rates of depression and PTSD and lower rates of alcohol use disorders than a community sample.