

COMBAT-RELATED DISORDERS: A PERSISTENT CHIMERA

DA Alexander¹, S Klein²

¹Professor of Mental Health and Director, Aberdeen Centre for Trauma Research, The Robert Gordon University, Aberdeen.

²Reader, Aberdeen Centre for Trauma Research, The Robert Gordon University, Aberdeen.

Abstract

Whilst there may be some individuals who genuinely enjoy combat, for most troops it represents many emotional challenges, such as, overcoming fear and being witness to death, suffering and mutilation, as well as having to tolerate extremes of physical discomfort.

At present we lack sufficiently valid and reliable methods of screening out those personnel particularly vulnerable to adverse reactions to these challenges. The authorities should aim to provide good training, an appreciative milieu, and a working climate in which those with genuine psychopathology feel confident to admit this, without censure and stigma, and to have access to evidence-based treatments.

We should also remember that military life offers much to many men and women, and that surviving physically and psychologically the unavoidable brutalities of combat can often leave a legacy of positive outcomes. We must avoid becoming preoccupied with risk and psychopathology.

Keywords: Combat, PTSD, peer support, resilience, positive outcomes

Introduction

Military combat requires human beings to kill other human beings. This requirement, however, represents a genuine paradox. Despite what the media, novelists, and others depict, man is not a natural “killing machine” of his own species. A detailed review of US rifleman in World War II by Marshall (1974) confirmed that only 15-20% discharged their weapons at the enemy. Other inquiries have also confirmed extremely low killing rates through hand held weapons in other campaigns (Grossman, 2007). Also, most evidence confirms that killing at a distance, of a relatively depersonalised target, is for most people much easier than is killing at close range and in hand-to-hand combat. Interestingly, most killing, at least in earlier conflicts, took place whilst the vanquished were in the retreat phase. One could argue that killing in this phase was psychologically easier because in retreat the faces of the enemy were not identifiable and because the “retreat” of the enemy evoked a primitive, predatory instinct which rendered killing more psychologically acceptable. This built-in resistance to killing one’s own kind has probably always been recognised by the military authorities. Richard Gabriel (1987, p.69), in his book “No More Heroes”, states that, “It is man, not his machines, that set the ultimate limits on battle performance”.

The “chemical soldier”

Further evidence supporting this proposition derives from Gabriel’s so-called “chemical soldier”. Throughout history, it seems as though combatants have had to fortify themselves with various psychoactive substances. The latter have included the essence of a mushroom, which was a powerful analgesic - made all the more powerful when warriors drank their own urine, after eating the mushrooms, or drinking the urine of deer who

had consumed the same. Hashish was used by the Muslim “Hashshashin” in their 13th Century wars against the Crusaders; cocaine (derived from the coco leave) was favoured by the Incas who fought Pizarro’s conquistadores; the jigger of rum was more than welcomed by the British troops during the First and Second World Wars, and marijuana, alcohol and certain opiates, brought psychological respite to the US forces during the Vietnam conflict.

Self-preservation

The history of military combat also confirms that, however “honourable” may be self-sacrifice in military combat, it is not a natural, built-in response. Throughout military history, there is evidence of combat troops injuring themselves deliberately to ensure their removal from the horrors of the combat field. Roman legionnaires used to cut themselves to this end - despite running the risk of the death penalty if they were found guilty of such efforts! Troops have also been known to shoot themselves (in carefully chosen, non fatal sites) or to remove winter protective clothing to induce frostbite (preferably of the dominant hand and trigger finger!). These and other self injuries confirm that most human beings (psychopaths excepted!) find military combat an existential and physical threat, and an adverse experience. It is therefore hardly surprising, against this naturally defined drive to self preservation, that warriors have displayed throughout history psychological reactions when threatened with injury and/or death.

Combat-related disorders

Military annals are awash with “diagnoses” which affirm this most fundamental principle of the human condition. They are far too numerous to list here, but they include: “nostalgia” (first reported in 17th Century Swiss troops, and with its counterparts being observed in German troops [“Heimweh”], in Spanish ones [“estar roto”], and in the French ones [“maladie du pays”]); “disordered action of the heart”; “irritable heart”; “neurasthenia”; “effort syndrome”; “shell shock”, and “battle fatigue”. This is but a sample of a lexicon which has developed over centuries and, temporarily, has come to a halt with the so-called “Gulf

Corresponding Author: Professor David A Alexander,
Aberdeen Centre for Trauma Research, Faculty of Health and
Social Care, The Robert Gordon University, Garthdee Road,
Aberdeen AB10 7QG

Tel: 01224 263100/01/02 Fax: 01224 263109

Email: d.a.alexander@rgu.ac.uk

War Syndrome"; a concept no less contentious than some of its predecessors (Kang *et al.*, 2002).

This plethora of terms confirms the ubiquity of adverse psychological reactions to combat, and, at the same time, reveals the varying lack of uncertainty about the aetiology of these at times colourful and dramatic diagnoses.

As most of these terms imply, physical causation was initially the prime suspect, and, therefore, physicians and, subsequently, neurologists (rather than psychiatrists and psychologists) were more likely to be involved by the authorities. This approach was not a gross error of judgement but merely a bias which reflected the pre-eminence of the physical sciences. Moreover, psychological distress is still often expressed, particularly in non Western societies, through somatisation (Engel, 2001; Klein and Alexander, 2007, p.241).

The changing face of combat

Wessely (2005) constructively reminds us that there is no single "experience" of war. Combat zones vary, as do weaponry, strategies and tactics, and the motives for the aggressive encounter. These and related factors need to be identified and considered in order that we can understand differences and similarities of reactions displayed by combat troops. Almost every military era generates some innovation which transforms the conduct and effectiveness of combatants. For example, with the introduction of stirrups the cavalry became a much more powerful and threatening force. Similarly, rifled barrels, and the introduction of the Gatling and machine guns heralded a new era of lethality. Not only have contemporary weapons become more devastating in their destructive power but they have also become much more mobile and flexible in their use.

Another important issue is that modern warfare has moved from "linear" to "swirling" tactics (Gabriel, 1987, p.19). The former were represented by clearly defined front and rear lines, with serried ranks of advancing and (less serried!) ranks of the retreating forces. "Swirling" tactics refer to a very different combat environment, one characterised by fluidity, changing boundaries, greater personal vulnerability (particularly for the infantry) and more insecurity. In this new tactical environment troops may find themselves deep in the heart of enemy territory and isolated from their main supporting force. Strike aircraft, fixed wing and helicopters, through their weaponry, speed and mobility have re-designated what are the "safe" rear zones. Modern communications and optical technology have ensured that military combat can now be engaged 24 hours a day; in poor weather and night conditions, and in the most inhospitable terrains. As a consequence, there is little respite for combat troops. The range and accuracy of contemporary weapons have transformed the "killing zone". In World War I this was measured somewhere between five and 10 miles; now, it has to be measured in hundreds of miles.

All of these developments impact on the psychological welfare of troops and, as indicated above, the infantry in particular who traditionally represent the highest risk, by numbers, of "psychological damage". So many of these technological and related changes present themselves in Iraq and Afghanistan theatres; the consequences thereof we should anticipate and be prepared for. In our planning, we should be mindful that a combatant is more likely to become a psychiatric casualty than one due to enemy fire in all its varieties. Another factor which is likely to swell the ranks of the "psychologically damaged" is the increasing use of reservists. Nobody would doubt their motivation and commitment, but they cannot be as well trained and prepared as full time combat troops. They may also be deployed to terrains and climates with which they are thoroughly unfamiliar; they may be deployed to full time units whose members they do not know (thereby running the risk of

missing out on the sustaining effects of peer support). These factors should ensure that we are not surprised when we hear that there are higher levels of psychological difficulties in combat and, most strikingly, on demobilisation among reservists (Browne *et al.*, 2007). An unexpected finding from this study was that Post-traumatic Stress Disorder was more strongly associated with the soldiers' circumstances on demobilisation than with combat-related events.

Peacekeeping

The contemporary political climate has also imposed another responsibility on our military, and that is one of peacekeeping duties. The British Army has had particularly valuable experience in this role during the "Troubles" in Northern Ireland. One might imagine that these duties would be much less emotionally taxing than overt, offensive combat. However, Greenberg *et al.* (2008) remind us that peacekeeping troops can also be exposed to a number of disturbing events some of which are similar to war (ie, they may be targets for the enemy). But they may also be victims of other disturbing features of their role. They are required to protect civilian populations (among whom may be their "enemy"), and they may have to bear witness helplessly to atrocities.

Military psychiatry

Regardless of the diagnostic and descriptive semantics, long has it been known that war can cause psychological, and, in some cases, cause long term or even permanent psychological damage. Governments have been troubled by these consistent observations, not only because they threaten a reduction to their complement of fighting troops, but because they raise the spectre of extended and costly pensions. Moreover, in addition to these self-defining groups of combat veterans, there will be many other combatants whose suffering and damage is not brought to the attention of the medical and other healthcare authorities due to such impedimenta as anticipated stigma and criticism for being "weak", as well as a sense of not being worthy of professional help because their other colleagues have suffered even worse.

Although combat-related psychiatric sequelae generally encouraged a more widespread sympathetic attitude to suffering combatants, it is important to remember that even high profile figures during World War II, such as Winston Churchill, advanced a very sceptical view about the role of psychiatrists, "I am sure it would be sensible to restrict as much as possible the work of these gentlemen, who are capable of doing an immense amount of harm with what may easily degenerate into charlatany. The tightest hand should be kept over them, and they should not be allowed to quarter themselves in large numbers among the Fighting Services at the public expense....there are quite enough hangers-on and camp-followers already" (cited in Ahrenfeldt, 1958, p26).

Military psychiatry has done much to inform the civilian world about the aetiological relevance of the severity of traumatic events, the factors which render individuals vulnerable to adverse post-traumatic reactions, and the potential and limitations of early psychiatric intervention.

Forward psychiatry

Some authorities ascribe to the Russian forces, during the Russo-Japanese War (1900), the first efforts towards "forward psychiatry". The Russians questioned the advantage of returning troops to the safety of the rear lines because this seemed to lead to the so-called "evacuation syndrome", such that it was difficult to return them to the front. Their evidence suggested that setting up front line centres was a more effective way of enabling troops to return to the front line. This

philosophy was endorsed by the French and British forces in two subsequent World Wars, in the Vietnam War and by the Israeli Defence Force during the Yom Kippur and Lebanon Wars. Jones and Wessely (2003), based on careful analyses of combat statistics, suggest that the claims for the advantage of "forward psychiatry" may have been exaggerated, but, on balance, the empirical evidence is probably supportive of it and, most certainly, it has face validity. There are many claimants, including Dr Myers (a French psychologist) and Dr Salmon (an American doctor) to the setting out of the core principles of P (proximity), I (immediacy), and E (expectancy). In summary, these principles imply that the emotionally disturbed troops should be dealt with near the front line (and not back in the safety of the "rear"); they should be dealt with promptly, and every help given to them should be based on the expectation that they will be able to return to combat. Much of their care in these "Sorting Centres", and other front line centres, was based on strict disciplinary lines tempered with "re-education" and a good deal of "tender loving care" (in the fashion of sleep, food and physical comfort). Some such centres were entitled "NYDN" centres (ie, Not Yet Diagnosed Nervous).

Treatments

Early psychiatric treatments are almost unavoidably viewed now with some concerns. Were they really treatments or punishments, some might ask? A popular mode of treatment delivery was the use of electricity (so-called "Faradism"). Many methods were devised, and some included the use of unmodified application of electricity to the tongue and palate. Viewed through contemporary spectacles such interventions may be seen as barbaric however well-intended they might have been during the Great War. Some of the French regiments preferred the method of strapping down a "shell shocked" soldier overnight in a shell hole and releasing him the following day (if he survived!) in the hope that he had become "desensitised". Hard to know which might have been the more aversive - the treatment or the threat of death by the enemy. In World War II, there were other medically aggressive treatments including psychosurgery and insulin coma - each pursued with great enthusiasm and faith. In contemporary times, treatment for combat-related disorders, such as Post-traumatic Stress Disorder, should be much more evidence-based. For example, according to the National Institute for Clinical Excellence (NICE, 2005), psychological treatments are the first line of treatment for this condition. The two recommended treatments are Trauma-Focused Cognitive Behavioural Therapy and Eye Movement Desensitisation and Reprocessing. Medication is also acknowledged as an appropriate treatment, particularly when there are legitimate reasons for not pursuing a psychological approach (these include a lack of suitably trained personnel; a failure to respond to a psychological therapy, and the patient's aversion to psychological treatments). Two antidepressants, namely, paroxetine and mirtazapine are recommended for use by non specialists (eg, general practitioners), and amitriptyline and phenelzine are recommended for use by mental health specialists. However, it would be a serious error of judgement to believe that civilian treatments can be used with the military without careful consideration of their specific needs as well as those of the families of the combatants.

The understanding of combat-related disorders

Some of the earlier diagnoses, viewed through a 21st Century prism, do seem to be bizarre and insensitive. However, two factors must be borne in mind. First, psychiatry was an embryonic discipline during World Wars I and II. Psychiatrists

and psychologists were viewed with suspicion and scepticism not only by the non clinical authorities but by some of their own medical colleagues. Second, we cannot ignore the fact that military strategists had as their primary responsibility that of winning a war. To do so, they could not tolerate any unnecessary loss of their fighting manpower.

Assumptions about underlying causes of combat-related conditions inevitably shape their treatment. Even in the 21st Century, we are still struggling to identify causal, precipitating and maintaining factors which relate to combat and other trauma-induced conditions. Whilst it may not make for pleasant 21st Century reading, we cannot be too critical of those who sought explanation in terms of "lack of moral fibre", cowardice, and earlier life adversities (unrelated to combat). Other causal contenders included carbon monoxide poisoning, cerebral damage occasioned by atmospheric pressure changes due to artillery ordnance, excessive fatigue and noise, unsuitable accoutrements (eg, webbing), and parade drill procedures (some thought that the over-exertion of the chest during drill was a key factor). The principal emphasis on physical causation as indicated above was in line with civilian psychiatry. Initially, fear was recognised as a causal factor only in so far as it induced "cowardice" in some.

The execution of men in World War I for alleged cowardice has endured as a highly emotive and contentious issue. The high profile case of Private Harry Farr became a public, military and legal cause célèbre (Wessely, 2006). Private Farr was sentenced to death by a Field General Court Martial for "cowardice", and the sentence was carried out on 16 October, 1916. In some respects, he was very unlucky because most death sentences were commuted; only about 11% of over 3,000 men sentenced to death were indeed executed. On the other hand, this statistic offered no consolation to his family who fought a lengthy and difficult campaign to achieve a pardon. This was finally granted in 2006, as it was to others in the same position. It is easy to be moralistic about the events and decisions which were taken in extraordinary circumstances almost a century ago, but judgements had to be made then, and they had to take into consideration the prevailing level of scientific and medical knowledge, the socio-political context of the war, and the risk of military failure.

Another matter, emphasised by Wessely (2005) which, it is alleged, plays a significant role in post deployment adjustment, is the meaningfulness of combat for the warriors. Their view will of course, in large part, reflect how society views the purposefulness of the military conflict. Unfortunately, adverse reactions to the conflict itself may be displaced onto the returning troops. The Vietnam War almost certainly represents such a circumstance. The Vietnam War was a lengthy one, lasting from 1961 until 1975. It ended in rather inglorious retreat by a military force which was far better equipped, had a much greater manpower resource, and had exclusive control over airspace. For economic, political and humanitarian reasons, however, there was a very considerable "anti-war movement" in the American home population. As a result, the returning "Vets" were not universally welcomed as the archetypal "returning, conquering heroes". On the contrary, they were sometimes regarded as pariahs, and were met with a lack of respect and even condemnation and opprobrium. Many authorities have suggested that it was this climate to which the Vets returned that played a large part in determining the psychosocial problems of adjustment and frank psychopathology allegedly observed among the returning troops. There may be a lesson for the British authorities with regard to those who return from Iraq and Afghanistan as one could not pretend that these are universally popular military campaigns.

The move towards conceptual order

Conceptual uncertainty and a lack of testable aetiological models prevailed to the disadvantage of the psychologically damaged combat veterans for many years. However, the American Psychiatric Association were encouraged to take an innovative step by the American Government following the Vietnam War. The psychological “fall out” after that military campaign disturbed the American Government because they thought they had solved the issue of combat stress. However, the post-deployment allegations of widespread psychosocial problems of adjustment and psychopathology referred to above inspired a rethink. In the third edition of the Diagnostic and Statistical Manual (American Psychiatric Association, DSM-III) there was introduced a diagnostic landmark, namely, Post-traumatic Stress Disorder (PTSD). It was however, a diagnosis which probably emerged into the formal psychiatric nomenclature not just because of some irresistible medical and epidemiological credentials but, at least in part, because of socio-political pressures, particularly exerted by some distinguished Vietnam Veterans and mental health professionals. To understand the climate from which PTSD emerged, we need to remind ourselves of the features of the Vietnam War. As was indicated above, much of the American public was disaffected with the war, its causes, its conduct, and its outcome. It has also been argued that the introduction of PTSD had more to do with “national guilt” in the USA, and with the vociferous claims of influential persons in the anti-war movement, than anything else.

Post-traumatic Stress Disorder (PTSD)

There has been much debate (some of it intellectually sterile) about this diagnosis, but it is worth considering the strengths and weaknesses of the diagnosis, and issues relating to delayed onset and reporting.

Strengths

Some have argued (eg, Alexander, 1996) that its introduction had a number of positive gains. First, it legitimised a great deal of otherwise inexplicable and/or ignored suffering because it focused on the pre-eminent aetiological role of the trauma rather than on some putative personal weakness. Second, it introduced a degree of order among what was a chaos of proliferating diagnoses generated by various military campaigns and by civilian events. Third, it inspired an unparalleled volume of research (Bedard *et al.*, 2004); the inception of specialist trauma journals (such as the Journal of Traumatic Stress and the PTSD Research Quarterly) and organisations dedicated to trauma, eg, the International Society for Traumatic Stress Studies and the European Society for Traumatic Stress Studies.

Weaknesses

Inevitably, some consequences of the introduction of PTSD have been less desirable. First, it has been grossly over-diagnosed. The most recent addition of the Diagnostic and Statistical Manual (DSM-IV, APA, 1994) and the International Classification of Mental and Behavioural Disorders (ICD-10, WHO, 1992) insist that the diagnosis should not be made until “one month” and “several weeks” respectively after the trauma. It is therefore not equivalent to “shell shock” or “combat stress”. These last two named disorders have their contemporary equivalents in “Acute Stress Reaction” (ICD-10) and “Acute Stress Disorder” (DSM-IV). The time criterion is also a crucial one because it should ensure that normal short term reactions, including flashbacks, hyperarousal and avoidance are not prematurely identified as “symptoms”. Indeed, until several weeks after the trauma these ought to be regarded as normal reactions. A second problem with PTSD, as a diagnosis, is that it has usurped centre stage; far too much exclusive attention has

been dedicated to this one diagnosis in the clinic, legal, and research domains. Consequently, other important trauma-related conditions are often overlooked, under diagnosed, and under researched. PTSD, as a single diagnosis, is not all that common after trauma; Klein and Alexander (2006) in their review confirm that it is much more likely to occur, in about 80% of occasions, in the context of co-morbidity (depression, anxiety, and substance misuse in particular). The third difficulty with PTSD as a diagnosis is the so-called “stressor criterion”. The DSM-IV and the ICD-10 define this criterion differently, as can be seen in Box 1.

DSM-IV	ICD-10
<ul style="list-style-type: none"> • “The person experienced, or was confronted with an event that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.” • The person’s response should include “intense fear, helplessness, or horror.” 	<ul style="list-style-type: none"> • “A stressful event or situation (short- or long-lasting) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone.”

Box 1. The “stressor” criteria from DSM-IV and ICD-10 for the diagnosis of PTSD

Many authorities, including Weathers and Keane (2007), correctly point out that it is probably an impossible task to provide a universally acceptable definition of a stressor which would satisfy all authorities, patients and clinicians, because any traumatic event is characterised by various dimensions, including, duration, number of fatalities (real and feared), involvement of loved ones, personal threat, predictability, controllability, preparedness, and the meaning of it to the victim.

It is understandably difficult (particularly in Courts of Law), to explain why it is that a patient can have PTSD according to the ICD-10 but not according to the DSM-IV. Also, DSM-IV requires the satisfaction of a number of other symptoms whereas the ICD-10 requires only the fulfilment of exposure to the stressor criterion and the reporting of re-experiencing of that trauma (through unbidden flashbacks, memories and/or nightmares). Another problem with this diagnosis (although not exclusive to PTSD) is that there is no objective biological marker of the condition. Therefore, the diagnosis of the condition is very reliant on self report. Even if a highly structured psychiatric interview is used (eg, the Clinician-Assisted PTSD Scale, Blake *et al.*, 1990), there has to be much reliance on the accuracy and veracity of the patient with regard to the stressor itself. Concerns about this circumstance have been underscored by the findings of, for example, Lynn and Belzen (1984) which confirmed that some soldiers reporting themselves to be suffering from PTSD had not even been involved in combat. Interestingly, moreover, Wessely and Jones (2004) report that those Vietnam Vets who had not been involved in combat had the highest rates of hospital admission for stress-related disorders, during and after the Vietnam War.

Baggaley (1998) has also provided an excellent article on “Military Munchausen’s Disorder” in relation to combat veterans. He distinguishes between factitious accounts which are wholly fabricated by individuals who have had no combat experience and those individuals who over-elaborate and dramatise versions of real events. He offers explicit advice on how to identify such factitious accounts.

Another challenge facing not only clinicians but researchers and legal personnel is a finding confirmed by Wessely *et al.* (2003). Their research, involving a longitudinal follow-up of Gulf War veterans, indicates that memories of traumatic

military experiences may not be reliable over time however honest may be the veterans. Krinsley *et al.* (2003) also agree that the assessment of trauma is a reactive process which may influence memory retrieval and/or reporting. However, they do suggest that individuals are more likely to recall those events which fulfil the criteria for PTSD than those which were merely witnessed as they happened to others.

Delayed onset and reporting

PTSD should not be diagnosed until several weeks after the trauma experience, but there are also reports of delayed onset (Schnurr *et al.*, 2003). Such reports may be due to a subsequent post-combat experience which re-activates the previously dormant and latent memories and emotions. On the other hand, this phenomenon does need to be distinguished from “delayed reporting”, which may be attributable to stigma and the inhibitory effect of the “macho” culture in the military.

Personality change

The ICD-10 also differs from the DSM-IV in that it offers another diagnostic category, that of “Enduring Personality Change after Catastrophic Experience”. This is a helpful diagnosis which allows us to accommodate individuals who have endured particularly harrowing and extended trauma, such as being tortured and being a Prisoner of War. The features of this condition are:

- a hostile and distrustful attitude
- social withdrawal
- feelings of hopelessness and emptiness
- a chronic sense of being on edge
- estrangement

Epidemiology of combat-related psychiatric disorders

To compare psychological casualty rates across eras, combat zones, and military units is of limited merit and fraught with the risks of misrepresentation and misattribution. In World War I most enemies suffered similar levels of psychiatric casualties. By 1917 about 20% (representing 40,000 troops) of the total number of war pensioners from the British Forces were suffering from psychiatric disability (O’Brien, 1998, p.9). Despite their extensive predeployment selection scheme, in the Second World War, admissions to the US military hospitals for psychiatric reasons were twice those of the First World War (Gabriel, 1987, p.117).

The Korean War (a largely neglected one by researchers) generated, according to Ikin *et al.* (2007) high levels of psychopathology, evident even 50 years after the conflict.

The most extensive survey of post-traumatic psychopathology among Vietnam Vets was the National Vietnam Readjustment Study conducted by Kulka *et al.* (1990). It reported PTSD prevalence of 15.2% and 8.5% of male and female troops respectively. (Although post Vietnam figures have been challenged by Frueh *et al.* [2005] on the basis of the veracity of the reports of combat exposure.)

Contemporary conflicts, eg, the Gulf War and Iraq Invasion, tend to yield lower figures. Hotopf *et al.* (2006) estimated a 4% incidence of PTSD among UK troops returning from Iraq; Hoge *et al.* (2004) however described a higher figure of just under 13% for returning troops and Engelhard *et al.* (2007) reported rates varying from 4% - 21% among Dutch troops returning from Iraq. Studies which report symptoms, rather than diagnoses, imply a much higher level of psychopathology. Lapierre *et al.* (2007), having followed up US troops from Iraq and Afghanistan, reported that about 44% of soldiers had symptoms of depression, and post-traumatic stress.

To make sense of these figures careful analysis must be made

of such factors as the intensity of combat; whether the data were from reservists or full time troops; whether the data derived from self-report or from structured clinical interviews; whether the psychopathology was genuinely combat-related, and how long after deployment were the surveys conducted.

Screening and prevention

Screening out those who may be particularly vulnerable to the rigours of combat is fraught with difficulty (Jones and Wessely, 2005). No military screening programme has ever proved wholly successful. The most obvious failure was that of the Americans during World War II. Their screening programme of potential recruits was so rigorous that the potential pool of combatants was seriously compromised. This screening also highlighted another factor which needs to be considered, and that is the psychological impact on those who are rejected through the screening programme. They are likely to be exposed to stigma, criticism, and prejudice. Because of such adverse consequences of screening, any contemporary military programme, used in this country, would now be required to meet the extensive criteria set out by the National Screening Committee (1998). Ironically, but revealingly, the American authorities had to recruit many of those whom they had initially rejected. Generally, these individuals coped successfully with the demands of combat, thereby raising serious doubts about the reliability and validity of the screening measures themselves. Screening measures, based on socio-demographic factors, intelligence and personality generate too many false positives and false negatives. Before the 2003 Iraq War, a longitudinal cohort study of UK troops was initiated by Rona *et al.* (2006) to determine whether or not screening for mental disorder could have identified those who later developed mental illness. The response rate of 69% was good, but the predictive rate was disappointing. One consistent paradox of course is that one of the most potent predictors (if not the most potent) of adverse psychological reactions is the intensity itself of combat, but since the soldiers have not yet been exposed to it, that could hardly serve as a predictor. Lord Owen’s judgement on the PTSD Class Action (Mr Justice Owen - Multiple Claimants v. MoD, 2003) confirmed that screening used by the military, with current levels of knowledge, would offer no significant protection against the development of post-traumatic psychopathologies occasioned by combat.

In the face of the unremitting psychiatric casualty rates reported during World War I, and subsequent conflicts, an obvious question is how to prevent such casualties. Reducing the psychologically deleterious effects of combat has been a long standing (but largely unfulfilled) aim. The Graeco Roman armies sought to “desensitise” and “toughen up” their troops through the strictest disciplines and the harshest of training and realistic exercises. Another factor, conducive to loyalty and team spirit, was the decision to choose units from the same geographical areas - as did the British regimental recruiting system.

Stress Inoculation Training

Developed in particular by the American psychologist, Donald Meichenbaum (1985), the essential principle is to expose troops in training, under controlled conditions, to the closest approximations to the circumstances with which they will have to contend in combat. This may include the use of real ammunition. This strategy helps to reduce anticipatory anxiety of the unknown and to develop coping strategies and self confidence. However, the largely unsuccessful results of the former “Battle Schools” and “Hate Training” serve as a reminder as to how narrow is the line between “desensitising” troops to the aversive stimuli of combat and “sensitising” them (ie, making them more anxious and vulnerable).

Critical Incident Stress Debriefing (CISD)

Particularly in the late 1980s and 1990s, CISD attracted much enthusiastic support, following the efforts of, for example, Mitchell and Everly (1995), as a means of relieving distress and preventing the onset of PTSD. (It was considered to be especially suitable for the military and the emergency services.) Unfortunately, subsequent evaluative research has not supported its early promise (NICE, 2005). Although its protagonists have grounds for criticising the nature and quality of that research, the consensual view is that mandatory, one-off CISD sessions are contraindicated, as there is a risk of making participants feel worse, probably through “retraumatising” them.

Trauma Risk Management (TRiM)

Introduced by the Royal Marines, TRiM represents a peer-based means of supporting and assessing individuals at risk of post-traumatic psychopathology. Although it too requires rigorous evaluation, it has found much favour with the military (Keller *et al.*, 2005). Peer support and the “buddy system” have long served the military in times of crisis, and it would make sense to build on this. This has a more intuitive appeal to their being informed that there is a “battalion of trained counsellors standing by”, with unfamiliar skills and terms (however well-intended).

Resilience and positive growth

To end on these issues is not an afterthought; it is a way to highlight their importance. Military conflict is not just about suffering, death and injury; there can also be positive outcomes (Hacker Hughes *et al.*, 2005). Not only can persons display (in response to traumatic events) remarkable resilience and fortitude, but they may display some positive gains after coming through some dreadful incident. These gains include: a revision of their life values and priorities; strengthened professional and/or personal relationships, and an awareness of personal strengths not previously recognised. It is important we should not become preoccupied with failure, weakness, and psychopathology because man may indeed be more of a natural survivor than he is a natural warrior.

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