Occupational Medicine 2015;**65**:331–336
Advance Access publication 16 April 2015 doi:10.1093/occmed/kqv024

Promoting organizational well-being: a comprehensive review of Trauma Risk Management

D. Whybrow[1], N. Jones[1] and N. Greenberg[2]

[1]Academic Department of Military Mental Health, King's College London, Weston Education Centre, London SE5 9RJ, UK,
[2]Department of Psychological Medicine, King's College London, Weston Education Centre, London SE5 9RJ, UK.

Correspondence to: D. Whybrow, Academic Department of Military Mental Health, King's College London, Weston Education Centre, Cutcombe Road, London SE5 9RJ, UK. Tel: +44 (0)20 7848 5351; fax: +44 (0)20 7848 5408; e-mail: deanwhybrow@hotmail.com

Background Trauma Risk Management (TRiM) is a peer support system developed within the British Armed Forces. It aims to ensure that trauma-exposed personnel are properly supported and encouraged to seek timely help should they develop mental health problems that fail to resolve spontaneously.

Aims To summarize current knowledge about TRiM and make recommendations for further research.

Methods A search of PsychINFO, CINAHL and PubMed identified 13 published papers.

Results TRiM outcomes were represented in different ways within the relevant studies suggesting that TRiM may have effects additional to those that it seeks to achieve. For example, a randomized controlled trial demonstrated that TRiM had a specific positive occupational effect and did no harm; a qualitative study suggested that TRiM enhanced liaison between mental health workers and line managers and a service evaluation suggested that it reduced sickness absence. In general, the process appears to enhance trauma-exposed personnel's reliance on peer support and TRiM was reportedly acceptable and sustainable.

Conclusions Evidence suggests that TRiM's utility has moved beyond the military to other organizations where personnel risk occupational traumatic exposure. Further research would help to understand how TRiM is perceived by line managers and how it functions within the trauma-prone populations.

Key words Forward psychiatry; health promotion; PTSD; TRiM.

Introduction

Over the last decade, the UK Armed Forces (UK AF) have been heavily committed to global combat and support operations [1]. Military personnel are at risk of developing mental health problems as a result of their deployed role [2]. Psychological distress has been described as a relatively unavoidable risk for those engaged in combat [3]. Left untreated, mental health problems can have a significant impact upon a person's career, relationships and health [4]. To mitigate the risks associated with exposure to traumatic events, the UK AF developed a psychological risk assessment/peer support system called Trauma Risk Management (TRiM).

The TRiM system aims to detect personnel who are at increased risk of developing mental health problems and to ensure they get appropriate support. Where early psychological symptoms are not resolving, TRiM facilitates engagement with supportive services including health care. Within the UK AF, TRiM forms part of a comprehensive effort to support service personnel exposed to potentially traumatic events (PTEs) that also includes psycho-educational briefings, time for post-deployment decompression and access to medical and psychological services [5,6]. Peer support programmes have been criticized for their adoption by organizations that expose their employees to PTEs, without sufficient research-based evidence to support their utility [7]. The aim of this paper was to conduct a comprehensive review of the evidence for TRiM and its application to occupational groups that routinely encounter PTEs.

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Methods

PsychINFO, CINAHL and PubMed electronic databases were searched using the search terms: TRiM OR 'Operational Stress'. In addition, a public database of UK military psychiatric publications was accessed and one doctoral researcher was contacted [8]. Studies were included if they evaluated the application of TRiM within military or civilian settings. Articles describing the TRiM process were excluded if they did not measure outcomes or evaluate TRiM. Efforts were made to identify research from all possible sources. However, the same research team who carried out this review undertook most of the TRiM research.

Results

Thirteen papers were identified (Table 1), including three reviews, eight quantitative and three qualitative studies. Of note, one paper is included twice because it was mixed methods and one paper is an unpublished doctoral dissertation.

The review papers focussed on post-operational stress management, psycho-educational programmes and the prevention or mitigation of the psychological effects of trauma; the use of TRiM was discussed within the body of the review papers [1,15,16]. One paper suggested that military personnel who scored positive for probable post-traumatic stress disorder (PTSD) during post-deployment mental health screening were not likely to seek help [1]. The authors proposed that military personnel have a limited trust in mental health professionals but that the TRiM peer-led approach to signposting may be more acceptable to troops than psychological screening.

The second review of psycho-educational briefings noted a paucity of systematic evaluation of the effectiveness of organizational approaches to operational stress management and that studies to date appeared to focus upon measuring symptom reduction [16]. The review highlighted the need to measure the occupational outcomes and well-being, which are the target of most organizational stress management approaches. Overall, the effects of operational stress management interventions reviewed in the study were modest. The authors considered that it was important to have a formal process in place for mitigating the risk of psychological harm associated with deployment. TRiM was identified as different because it avoided excessive exploration of emotions and contained a follow-up component that was conducted some time after the initial intervention. This was in contrast to older intervention models such as single session psychological debriefings, which were emotionally focused [21].

The final review was of the approaches utilized by different AFs to either prevent or lessen the psychological impact of combat [15]. Three interventions were identified: Battlemind training, which involved psycho-education to troops at set times during the deployment; specialized resilience training, which sought to inoculate soldiers to the stress of combat operations through role-play and live demonstrations and TRiM, which was peer rather than medically led and was activated in response to specific traumatic events. The paper concluded that

Table 1. TRiM published papers

Study	Method	Description
Gould *et al.* [9]	Quasi-experiment	Military personnel (mainly Royal Marines); *n* = 124; psychological distress and social support
Greenberg *et al.* [10]	Semi-structured interview; Inductive Thematic Analysis	Royal Navy personnel; *n* = 142; peer response to a distressed colleague
Greenberg *et al.* [11]	Cohort study	Foreign and Commonwealth Office personnel post 9/11; *n* = 28; RAT compared with IES
Frappell-Cooke *et al.* [12]	Non-randomized parallel group comparison trial	Royal Marine & Army personnel; *n* = 180; pre-, during and post-operational tour; perceived social support, psychological distress
Greenberg *et al.* [13]	RCT	Navy personnel; *n* = 12 warships; psychological symptoms, stigma, occupational functioning
Fertout *et al.* [1]	Review	Post-deployment interventions
Greenberg *et al.* [14]	Semi-structured interviews; grounded theory	Navy personnel; *n* = 330; the acceptability of the TRiM process
Hourani *et al.* [15]	Review	Pre-, during and post-deployment operational stress management
Mulligan *et al.* [16]	Review	Psycho-educational briefings
Whybrow [17]	Autoethnography	Psychiatric nurse; *n* = 1; liaison
Whybrow *et al.* [18]	Audit	Medical and TRiM personnel; *n* = 229; awareness of mental health services
Hunt *et al.* [19]	Service evaluation	Police officers; *n* = 640; sickness absence, RAT
Watson [20]	Cross-sectional study	Police officers; *n* = 859; stigma

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most peri-deployment options lacked any assessment of outcomes but that this was understandable, given the environment in which they were delivered.

In terms of quantitative research, a cluster randomized controlled trial (RCT) compared TRiM on six Royal Navy warships to a control group of six further warships [13]. The trial sought to compare the difference in stigmatizing beliefs about mental ill health and organizational functioning. Naval personnel completed a comprehensive questionnaire utilizing previously validated instruments and scales relating to psychological health and stigma. Organizational functioning was assessed by comparing the rate of disciplinary offences. There was minimal exposure to PTEs, which may limit the generalizability of the findings. The results of the study suggested that there was little significant difference between the intervention and control groups in the rates of reported mental health problems, that no harmful psychological effects occurred but that there was some positive occupational effect in terms of reduced offending in the TRiM trained ships.

A non-RCT was conducted where TRiM practitioners attitudes about PTSD and help-seeking behaviours were compared to a control group of similar personnel who were TRiM naive [9]. The results suggested that those who undertook TRiM training had a significantly more positive attitude to stress and would be more likely to make use of the TRiM process; this effect was sustained over time. A limitation to this study was that the population was a convenience sample that did not appear to be wholly representative of the wider UK AF being comprised of predominantly Royal Marines [22]; this suggested a need for caution when extrapolating to the wider military population [23]. Furthermore, one experienced trainer delivered all the training, so it was unclear if the same positive outcomes could be achieved using a diverse range of trainers.

A non-randomized parallel group comparison of two combat units deploying to Afghanistan compared a group of Royal Marines and Army Infanteers before, during and post-deployment to Afghanistan [12]. The outcomes suggested that, within both groups, those who perceived less social support were more likely to report psychological distress. When comparing the two groups, the Royal Marines, who had TRiM embedded for several years prior to the deployment, reported higher perceived levels of social support during the deployment and less psychological distress overall. Key limitations were firstly, that although both units faced similar levels of combat, the Royal Marines have higher entry standards than regular Army personnel. It is uncertain what difference group ethos and employment selection process may have had upon their response to combat. Additionally, the response rates were not the same in the two groups, which may have introduced substantial bias [24]. More specifically, 91 out of 94 Royal Marines responded post-tour compared to 46 of 86 infanteers.

The ability of the TRiM Risk Assessment Tool (RAT) to detect symptom change over time and to predict occupational functioning was compared with an established measure (the Impact of Events Scale or IES). The population was a convenience sample of 28 personnel from the Foreign and Commonwealth Office exposed to the 9/11 terrorist attack in New York [11]. There was a statistically significant correlation between the change in symptoms detected by both the IES and the RAT scores over time. Notably, the RAT identified fewer people at risk of developing psychological problems. However, there was a convergence in those identified as at risk on the RAT and those identified as having persistent symptoms on the IES at the follow-up point. The small number of individuals identified as cases at follow-up were signposted on to further care and remained in employment. The key point of this study was that if the IES scores had been acted upon, many would have received unnecessary treatment, whereas TRiM appeared to correctly quantify the psychological risk. Were these findings to be replicated in a larger study, it would strengthen the finding that TRiM is an efficient process for ensuring those in need are signposted to help without prematurely medicalizing the psychological response to PTEs.

TRiM provides leaders with a framework within which to promote the psychological well-being of their subordinates. To achieve this, following a traumatic event, it is important that those with persistent psychological symptoms are assisted to access help from a range of sources including, but not limited to, medical services. A UK audit assessed the degree of corporate knowledge of the existence of deployed military mental health services in a combat zone by general medical personnel and TRiM practitioners [18]. The findings were that the majority of personnel who took part were aware of the function and capability of the deployed mental health services. The audit recommended that greater emphasis be placed upon the ability of the mental health team to conduct assessments in forward locations within the initial training of TRiM practitioners. This recommendation was based upon a statistically significant difference in the number of medical versus TRiM personnel who were aware that the mental health team would carry out assessments at forward locations. Limitations of this study included an unvalidated questionnaire and the use of a convenience sample.

Two final quantitative papers examine the application of TRiM within the police. The first was a service evaluation of Cumbria Constabulary's use of TRiM among their employees following a serious incident where a substantial number of people were murdered by a lone shooter [19]. A total of 640 police officers were assessed, of which 40% received a mixture of TRiM briefings and 1:1 TRiM risk assessments. Those who received just TRiM briefings were predominately exposed to lower

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levels of incident-related trauma. Within the intervention groups, the more psychologically distressed were triaged to a brief therapy intervention that included management and in-house welfare support co-ordinated by the organization's occupational health and welfare service and the in-house psychologist who provided targeted brief mental health intervention where appropriate. In the main, those who were not offered any brief mental health intervention remained stable, whilst those that were offered a psychologist-led intervention experienced a reduction in psychological risk similar to the non-intervention group. After accounting for socio-demographic factors, receipt of a TRiM intervention was positively associated with low levels of sickness absence and appeared particularly helpful for junior personnel. Approximately, two thirds of the police officers did not utilize TRiM after an initial offer was made via e-mail. What is unclear is whether they opted out of the process or simply did not feel they required the intervention.

The final, unpublished, paper examined self-reported psychological distress, attitudes towards help seeking, stigma and post-traumatic psychological growth in personnel from three police forces which use TRiM (n = 693) compared with two police forces without a post-trauma management programme (n = 166) [20]. Participants completed a cross-sectional online questionnaire and were recruited voluntarily from a combined sample of operational and non-operational Police personnel. Those in the TRiM group reported significantly lower stigma, lower psychological distress, greater positive post-traumatic change and fewer barriers to help seeking, than those in the non-TRiM group. However, there was no significant difference between the groups in terms of attitudes towards stress and PTSD. The authors conclude that even in forces using TRiM, there is still a considerable degree of stigma, particularly public-stigma, and barriers to seeking help for psychological distress, which needs to be addressed in future research and development of interventions. The research offers preliminary support for the use of TRiM within police settings.

The qualitative arm of the earlier TRiM RCT sought to understand how naval personnel might respond to a distressed fellow sailor [10]. This study is of interest because TRiM is a peer support system designed to enhance existing management structures with specific regard to managing psychological symptoms following a traumatic event [25]. In this study, 142 semi-structured interviews were carried out on board 12 warships. The written records were used as transcripts from which an inductive thematic analysis was carried out. The advantage to this form of thematic analysis is that it can be carried out once all the interviews have been completed, which is resource efficient. However, there is a risk that the participants' responses are taken at face value and less emphasis is placed upon exploring meaning at the point of enquiry [26]. Indeed conducting large numbers of interviews risks detracting from qualitative research because less time might be afforded to depth of understanding within the interviews and content analysis [27]. With these limitations in mind, the paper offers insight into the role of peer support within a disciplined service like the Royal Navy. In particular, respondents considered that they would help a colleague in need and that they would signpost to further help if the situation did not improve. This bodes well for a system such as TRiM that seeks to take advantage of natural peer support processes already integral to the UK AF.

A qualitative component to the TRiM RCT sought to understand how Royal Navy personnel experienced the implementation of TRiM 12–18 months after it was first introduced [14]. The results were that 50% of personnel in the TRiM trained ships were aware of TRiM compared with 7% on the control ships. This suggests that the process had been incorporated into the ships' standard operating procedures and was being utilized. A grounded theory approach was applied to understanding key themes relating to TRiM from those personnel who described a good understanding of the process (n = 43), which could lead to bias as they may have a more positive view of TRiM. The findings were categorized into favourable or unfavourable themes. TRiM was considered a useful process for managing traumatic events, relevant to the needs of the Navy and peer delivery was considered an appropriate medium for its application. However, it was suggested that the command structure should be cautious about who they selected to be trained as TRiM practitioners, that it required greater support from management and inexperienced practitioners may have lacked credibility.

TRiM is primarily designed as a mechanism for promoting access to health care services for those in need [25]. The final paper is an autoethnographic account of the interface between mental health services in a combat zone and the command structure which includes TRiM [17]. The aim of an autoethnography is to express the relationship between the researcher and their social world in a specified situation [28]. This paper sought to achieve this through a reflective journal about engagement with the chain of command. This was placed within a reflexive framework that strengthens the authenticity of the study because it helps the reader to understand how the author interpreted their experience [29]. The study was limited in that it was one nurse's account and is not generalizable, therefore the study might benefit from repetition in a larger and more diverse population [24]. With this limitation in mind, the study seems to suggest a role for TRiM to assist deployed mental health teams to

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effectively and efficiently liaise with commanders in order to support the operational capability of combat units.

Discussion

This review of available evidence about TRiM as an organizational health and well-being practice had four key findings. Firstly, TRiM was found to do no harm. Secondly, TRiM may have a positive effect upon organizational functioning. Thirdly, TRiM appears acceptable to personnel within hierarchical organizations such as the military. Lastly, TRiM may reduce organization sickness absence rates after traumatic events. These findings suggest that there may be distinct benefits from the use of TRiM within military and other hierarchical organizational settings. Additionally, less hierarchical organizations whose personnel are at risk of PTEs may also benefit from a management tool that does no harm, promotes organizational functioning, is acceptable to employees and has the potential to reduce absenteeism. This is consistent with recent UK guidance into the management of traumatic stress within organizations where staff work in high-risk environments [30].

A limitation to this review is that that much of the research into TRiM has been carried out by one MOD-funded research team and further investigations by independent research groups would be of value. Also this review has focussed upon TRiM specifically and there are other ways to manage exposure to PTEs, for example Battlemind psychological debriefing and stress inoculation [15]. Further research to better understand the commonalities and differences to these approaches may be of use.

Research into TRiM within organizational settings used a range of methodologies of varying degrees of rigour. A strength to this review is the comprehensive approach to drawing together what represents pieces to a puzzle into which new pieces are being inserted over time suggesting that TRiM is part of an organizational stress management picture. One aspect of TRiM that may warrant further research is a better understanding of how TRiM is viewed by line managers. TRiM is primarily a non-medical management tool and understanding how managers perceive and use it will assist organizations in incorporating and developing TRiM within their mental health support framework. A second aspect to TRiM for further research is the role that TRiM might play in improving occupational outcomes. Further research into the utility of TRiM in non-military occupational settings may also be warranted.

In conclusion, what is unique about TRiM when compared with other operational stress management models is that it is peer led, initiated after careful planning in response to PTEs and has a follow-up component that is designed to detect those with persistent symptoms. It provides managers within trauma-exposed organizations with a simple post-exposure tool that may help to foster good mental health within their people, promote resilience and make use of clinicians only when necessary. Finally, the process appears to be readily adopted within existing military organizational management and cultural mechanisms and is sustainable over time.

Key points

- Trauma Risk Management is a peer support system which aims to ensure that trauma-exposed personnel are supported by their line management.
- Trauma Risk Management is initiated after careful planning in response to potentially traumatic events and has a follow-up component that is designed to detect those with persistent symptoms.
- Evidence shows that Trauma Risk Management use is not harmful and may have a positive effect upon organizational functioning such as reduced sickness absence rates and less disciplinary problems.
- Trauma Risk Management is well received by personnel within hierarchical trauma-exposed organizations such as the military and the emergency services.

Conflicts of interest

N.G. is a retired member of the armed forces and has been involved in the development, delivery or evaluation of TRiM. He also runs an organization which provides TRiM training courses. D.W. is a serving member of the armed forces and has been involved in the development, delivery or evaluation of TRiM.

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