Corporate Knowledge of Psychiatric Services Available in a Combat Zone

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ABSTRACT Objectives: British forces have a comprehensive system for managing acute psychological distress in a combat zone. This includes peer support via Trauma Risk Management (TRiM), access to deployed medical personnel, and a Field Mental Health Team (FMHT). TRiM and medical personnel need to be aware of the FMHT's presence in the combat zone and capability to provide specialist mental health care. Methods: TRiM and medical personnel completed a survey based on 6 audit standards. Differences between TRiM and medical personnel and the effects of rank, role, and location in theater were assessed using the Pearson χ^2 statistical test. Statistical significance was defined as $p \leq 0.05$. Results: Most TRiM and medical personnel knew that an FMHT was embedded within the deployed force. Significantly less TRiM than medical personnel knew that the FMHT would carry out clinical assessments at forward locations. There was a high degree of satisfaction with the service provided by the FMHT. Conclusion: Corporate knowledge of the FMHT by both Medical and TRiM personnel was generally good. TRiM training should increase its emphasis on the FMHT's ability to undertake assessments at forward locations. Efforts by the FMHT to ensure corporate knowledge among TRiM personnel should focus on more forward locations.

INTRODUCTION

A Field Mental Health Team (FMHT) comprises of a number of military mental health professionals. It routinely deploys with British forces to combat zones.[1,2] There are two main ways that potentially distressed personnel can be referred to the FMHT. The first of these is the medical system, which is operated by nurses, physicians, and medical assistants (military paramedics) who can refer directly to the FMHT, and the second is a peer-delivered system of psychological first aid known as Trauma Risk Management (TRiM).[3] Although TRiM personnel can also refer to the FMHT directly, it is more usual that they would refer people through the medical system. In order for these systems to work effectively and often in partnership, it is important that both groups are aware of the presence, function, and capabilities of the FMHT in a combat zone.

Field Mental Health Team

The FMHT provides a specialist mental health service that includes providing clinical assessment and psychotherapeutic interventions to support United Kingdom Armed Forces (UK AF) deployed on combat operations.[2] The FMHT forms part of a comprehensive medical service that seeks to maintain the combat effectiveness of the fighting force through the delivery of "forward psychiatry".[1] One of the key principles of forward psychiatry is ensuring that specialist mental health care is ideally provided at the distressed individual's location. This audit was carried out by the FMHT that deployed to OP HERRICK 14 in 2011. OP HERRICK is the codename for current operations in Afghanistan. The team consisted of 3 military mental health nurses who supported British forces throughout their area of operations. Personnel can either self-refer to the FMHT, be referred by the unit medical personnel, who provide primary care services for deployed troops, or be referred by TRiM practitioners with the assistance of the unit chain of command.

Trauma Risk Management

TRiM is a peer support process where nonmedical personnel (TRiM practitioners) receive specific training about psychological trauma. This enables them to carry out an interview to detect the presence of severe or persistent distress in personnel who have been exposed to traumatic events. Practitioners can then ensure that line managers provide support to potentially distressed individuals, for example, through the provision of social support and alteration of duties.[4] Using peer support to assess and monitor the risk of psychological injury during combat may be both logistically more efficient and culturally more acceptable than using clinicians.[5] TRiM practitioners monitor people over time and signpost individuals, whose distress is not resolving, to the FMHT.[6] This approach is now established across the UK AF with evidence that it is acceptable to troops, appears to promote better unit functioning,[7] and helps facilitate social support.[8] Importantly, unlike previous models of postincident psychological support such as psychological debriefing,[9] TRiM has not been found to cause harm.[10] The FMHT supports this process by providing TRiM personnel with advice, support, and specialist assessment when necessary.

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Why Corporate Knowledge is Important

UK AF utilize both TRiM and deployed medical assets in an attempt to mitigate the risk of personnel developing psychological injuries following exposure to potential traumatic events and failing to seek help. Encouraging help-seeking behavior is important because there are a number of effective treatments available to help people who are suffering from the effects of post-traumatic stress symptoms and other psychological injuries.[9] The FMHT has the capacity to support, advise, and assist both TRiM and medical personnel in their efforts to maintain acutely psychologically distressed personnel in their operational role.[7] The FMHT is also able to provide specialist clinical assessments and expert advice to the chain of command (line management) for those personnel who remain psychologically distressed.[2] In order for this system to work effectively, it is important that both TRiM and medical personnel have corporate knowledge of the FMHT's presence, function, and capability; feel able to access it; and find any contact useful. Efforts are made to ensure this corporate knowledge exists within the formal training of medical and TRiM personnel. During combat operations, the FMHT seeks to reinforce this knowledge through informal liaison with key stakeholders such as medical and TRiM personnel. This audit assessed knowledge about all of these factors in deployed TRiM and medical personnel.

METHODS

Clinical audit forms part of a quality assurance framework designed to assure high standards within health care.[11] There are five recommended phases to the audit cycle; these are preparation, criteria selection, measurement of current performance, making improvements, and sustaining improvements.[12] In essence, audit is a way of finding out how current practice compares with standards of service delivery or care that are specified a priori.[13] This approach can be effective in improving practice, with the largest improvements being observed in areas that deviate furthest from the agreed standards.[14] However, the audit process can be poorly received within the workplace because it can be viewed as threatening and any proposed changes may therefore be met with significant resistance.[15] Perceived advantages of clinical audit include improved communication among colleagues and other professional groups, improved patient care, increased professional satisfaction, and better administration.[16]

Population and Sampling

This audit sampled two distinct populations (medical and TRiM personnel) deployed on Op Herrick 14 in Afghanistan. The estimated number of TRiM-trained personnel in theater was 947 (Email correspondence with McFarlane, 2011) and the medical population who provided primary care services to the deployed force was estimated at 140 personnel.

Audit Standards

Before this audit, no standards existed for assessing both the Medical and TRiM personnel's awareness of the deployed FMHT. Six standards were identified that were then agreed with the UK Medical Group Health Care Governance committee before conducting the survey (Table II).

Data Collection

The aim of this audit was to assess the levels of awareness of the FMHT against the preagreed standards. To achieve this, a 13-item anonymous survey was designed, which assessed awareness of an audit item using a simple yes or no response or a Likert scale that indicated the subjective utility of an FMHT capability where 1 = not very useful and 5 = very useful. The audit template is shown in Figure 1. Medical and TRiM personnel were surveyed during FMHT visits to various locations in Afghanistan. Data was also captured from medical personnel as they returned to the rear echelon toward the end of their tour. Finally, a member of the FMHT surveyed TRiM practitioners in the Camp Bastion departures lounge before they flew back to the United Kingdom.

Data Analysis

All analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 17. Pearson χ^2 test was used to assess associations between categorical variables.[17] Statistical significance was defined as $p \leq 0.05$. When assessing the level of satisfaction with FMHT liaison both before and during the Operation Herrick 14, a score of ≥3 represented a good level of satisfaction.

RESULTS

In total, 229 personnel were surveyed: 160 TRiM personnel (17% of the total available for sampling) and 82 medical personnel (59% of those available for sampling). 12 medical personnel were also TRiM trained and were therefore included in both the medical and TRiM sample. The sample characteristics are shown in Table I.

Overall, there were high levels of knowledge about the FMHT among those surveyed and levels of satisfaction were generally very high (Table II). There were no significant differences between the response of deployed TRiM and medical personnel with the exception of awareness that, where practical, an FMHT will undertake an assessment at forward locations where TRiM personnel were less aware than medical. Responders were generally satisfied with both mental health briefings delivered before the deployment and the service delivered by the FMHT in theater (Figs. 2 and 3).

Although the audit was generally positive with high levels of knowledge about the FMHT and its capabilities, medical personnel were more likely than TRiM personnel to be aware that the FMHT will undertake assessments at

The Field Mental Health Team (FMHT) is keen to improve the service and support that they provide to the men and women on operations. Fundamental to our role is effective communication with both TRiM and medical personnel. We would appreciate it if you could take 2 minutes to provide us with honest, anonymous feedback by circling your chosen answer to each of the questions below.

Rank: MNE/PTE etc JNCO SNCO Lt Cdr/Maj and below Cdr/Lt Col and above

Service: RN RM Army RAF

Contract: Reservist Regular

TRiM: N/A Practitioner Team Leader Unit Co-ordinator

Medical: N/A MA/CMT Nurse MO

Most Forward Location: MOB FOB PB CP

1. Before today, did you know that the military has uniformed mental health professionals who deploy on operations as an FMHT? Y N

2. Did you know that the FMHT visit people in forward locations? Y N

3. Were you briefed by the FMHT whilst preparing for this tour? Y N

4. If you answered yes to the last question, then how useful was this brief (please circle the appropriate number)?

Not Very Useful 1...2…3…4…5 **Very Useful**

TRiM Personnel

5. Did you know that if somebody you have TRiMMED is not recovering then they should be referred to the medical chain? Y N

6. Have you carried out a TRiM intervention (assessment or briefing) during this tour? Y N

7. Do you feel able to seek advice from medical personnel in relation to your TRiM work? Y N

8. Have you had any contact with the FMHT about TRiM related work during this tour? Y N

9. If you answered yes to the last question, how useful was this (please circle the appropriate number)?

Not Very Useful 1...2…3…4…5 **Very Useful**

Medical Personnel (If you are also a TRiM Practitioner then please complete the above section as well)

10. Did you know that people experiencing psychological distress can be referred on to the FMHT? Y N

11. Did you know that the FMHT will conduct mental health assessments in forward locations? Y N

12. Have you contacted the FMHT about a patient during this tour? Y N

13. If you answered yes to the last question, how useful was this (please circle the appropriate number)?

Not Very Useful 1...2…3…4…5 **Very Useful**

Do you have any other comments?

PLEASE WRITE ANY COMMENTS YOU HAVE ON THE OTHER SIDE OF THIS FORM

Thank you for taking the time to complete this questionnaire

FIGURE 1. FMHT: TRiM/Medical Personnel Anonymous Survey.

TABLE I. Demographic Data

	TRiM *n* (%)	Medical *n* (%)
Rank		
Private Soldier/Able Rating	19 (12)	36 (44)
Junior Noncommissioned Officer	42 (26)	21 (26)
Senior Noncommissioned Officer	70 (44)	11 (13)
Junior Officer (Major and Below)	26 (16)	9 (11)
Senior Officer	1 (1)	4 (5)
Not Known	2 (1)	1 (1)
Service		
Royal Navy	10 (6)	47 (57)
Royal Marines	46 (29)	3 (4)
Army	94 (59)	17 (21)
Royal Air Force	10 (6)	15 (18)
Location		
MOB	40 (25)	26 (32)
FOB	14 (9)	4 (5)
PB	45 (28)	12 (15)
CP	57 (36)	37 (45)
Not Known	4 (3)	3 (4)
Role		
Trim Practitioner	119 (74)	
Trim Team Leader	19 (12)	
Trim Unit Co-Coordinator	18 (11)	
Trim Not Known	4 (3)	
Medic		67 (82)
Nurse		2 (2)
Doctor		13 (16)
Not Known		

forward locations ($\chi^2 = 12.33$, degree of freedom [d.f.] 1, $p \leq 0.001$). Location in theater was also significantly associated with knowledge about the FMHT carrying out assessments in forward areas. Ninety percent (75/83) of personnel in the more secure areas of operations (main operating bases [MOBs] and forward operating bases [FOBs]) knew about this compared with 80% (120/151) of those in more exposed locations (Patrol Bases [PBs] and Check Points [CPs]) ($\chi^2 = 4.57$, d.f.1, $p \leq 0.02$). An examination of TRiM personnel only suggested that 87% (46/53) of those in rear areas (MOBs and FOBs) knew about the forward assessment capability compared to 72% (73/102) of those in forward locations (PBs and CPs) ($\chi^2 = 4.53$, d.f.1, $p \leq 0.05$). Rank and TRiM role (practitioner, team leader, and coordinator) had no effect on TRiM personnel's knowledge. The rank, role, and location in theater of medical personnel had no effect on knowledge about the FMHT's forward assessment capability.

DISCUSSION

This is the first study that has examined the knowledge deployed military TRiM and medical personnel have of the FMHT, which provides all specialist mental health support to deployed troops; there were four main findings. First, all medical and approximately 95% of surveyed TRiM personnel were aware that an FMHT was deployed to support them. Second, there were high levels of satisfaction following contact with the FMHT both before and during the deployment. Third, although most medical and TRiM personnel knew that the FMHT would deploy forward to carry out clinical assessments, this was significantly more likely to be known by medical (95%) than TRiM personnel (77%). Last, we found that the further forward TRiM personnel deployed, the less likely they were to know that the FMHT would assess their personnel at forward locations. The findings from this audit offer reassurance that there is good corporate knowledge of the psychiatric services available to UK AF in a combat zone. They might also serve as a guide to deployed mental health workers when considering how they can focus their psychiatric liaison efforts on future operational tours.

There are a number of limitations to this audit. First, this is a convenience sample, which introduces potential sampling bias as some groups were missed simply because the FMHT did not have access to them either at their location or when they passed through Camp Bastion. However, the demographic data does suggest that the sample is broad, with a good mix of different services, ranks, and geographical locations. Response bias is unlikely as there was a high response rate and very high levels of agreement between participants. Second, because this was a Royal Navy led UK Medical Group, the majority of medical personnel were from the Royal Navy. Thus, the results may not necessarily be representative of the wider Defence Medical Services. In addition, the author chose to audit medical personnel in the primary health care facilities, the ambulance recovery troop, the medical mentoring teams, and at forward locations. The rationale being that these were the personnel most likely to have contact with patients. Of note, a number of additional medical personnel were not surveyed because they worked in main base locations in administrative roles. Third, the structure of the Likert scale made it difficult to establish a valid cut point between positive and negative responses so that the author's subjectivity might result in a misinterpretation of borderline responses.

In spite of these limitations, this article does generate some points for further exploration. In order to be able to properly assist potentially psychological ill military personnel, both medical and TRiM personnel need to be aware of the FMHT and its role.[7] The FMHT provide the deployed force with a bespoke mental health capability including clinical assessment, the provision of advice to the individual or their chain of command, and, where necessary, provision of evidence-based treatments. The FMHT works in accordance to the principles of forward psychiatry; that is to say the principles of proximity, immediacy, expectancy, and simplicity.[2] These principles suggest that distressed service personnel are not evacuated to formal medical facilities; instead, they should remain near to the "frontline" where they can access social support from colleagues and continue to work, albeit in a reduced capacity (proximity), to treat them without delay (immediacy), and to promote the expectation that the serviceperson will recover sufficiently to continue within their operational role (expectancy) with simple interventions

TABLE II. Comparison of Findings to the Standards Set Before the Audit

	Standard	TRiM[a] *n* (%)	Medical[a] *n* (%)	(χ^2, d.f., *p*)
1	Awareness that there is an FMHT within the operational theater: 100% of people surveyed	149/159 (94)	82/82 (100)	(5.38, 1, ≤0.05)
2	Awareness that TRiM practitioners should refer individuals not recovering following a trauma through the medical chain: 100% of TRiM personnel surveyed	146/159 (92)	n/a	
3	Awareness that the medical chain refer individuals not recovering to the FMHT: 100% of medical personnel surveyed	n/a	78/80 (98)	
4	Awareness that, where practical, an FMHT will undertake an assessment at forward locations: 100% of people surveyed	123/159 (77)	78/82 (95)	(12.33, 1, ≤0.001)
5	Satisfaction with mental health liaison before the deployment: 80% of people surveyed satisfied	[b]95/100 (95)	[b]58/64 (91)	n/a
6	Satisfaction with support provided during the deployment: 80% of people	31/33 (94)	23/23 (100)	n/a
[c]2 & 3	Referral of those who do not recover with TRiM support	146/159 (92)	78/80 (98)	ns

n/a, not applicable; ns, not significant. [a]The disparity between the total number of responders for each standard is because not everybody answered every question. [b]Only people who remembered having a brief answered this question. [c]These items were treated as distinct as they were worded differently; but as they enquired about the same theme, they were combined and reanalysed.

such as sufficient sleep, food, rest, or contact with good friends/loved ones as available (simplicity).[4]

There is some evidence from Israeli studies that forward psychiatry is effective, resulting in a higher return to the frontline rate and a lower rate of subsequent post-traumatic stress disorder.[18] Even 20 years on, those soldiers treated at the frontline continued to report less post-traumatic stress disorder or suffer with other psychiatric symptoms, were less isolated, and had better social functioning than a comparable sample removed to the rear echelon.[19] However, the benefits of forward psychiatry might be because those individuals who were kept forward may have been either less unwell or are more highly regarded as effective soldiers by their chain of command because they had previously proved themselves to be psychologically resilient. Conversely, those with a poorer prognosis or those known

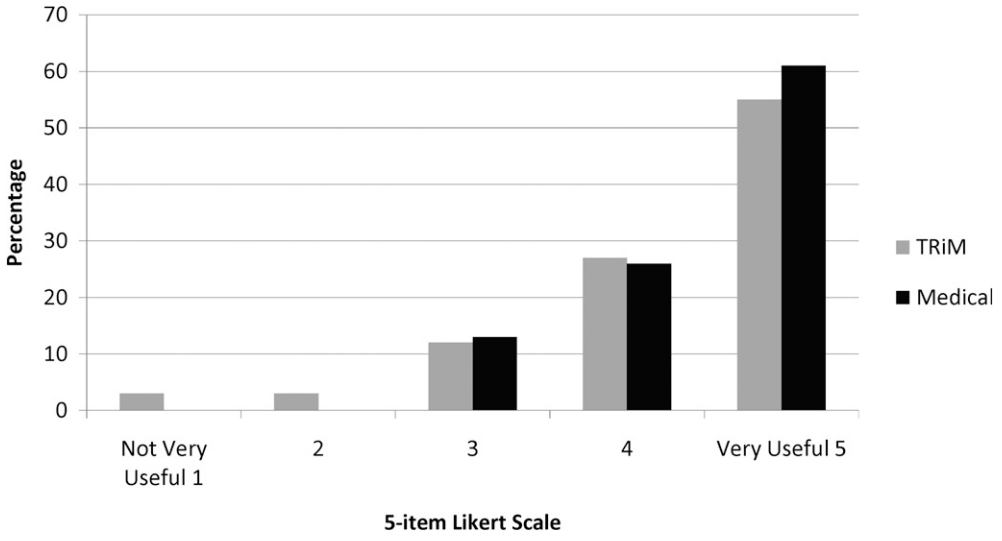

FIGURE 2. Satisfaction with the mental health liaison before the deployment (Standard 5).

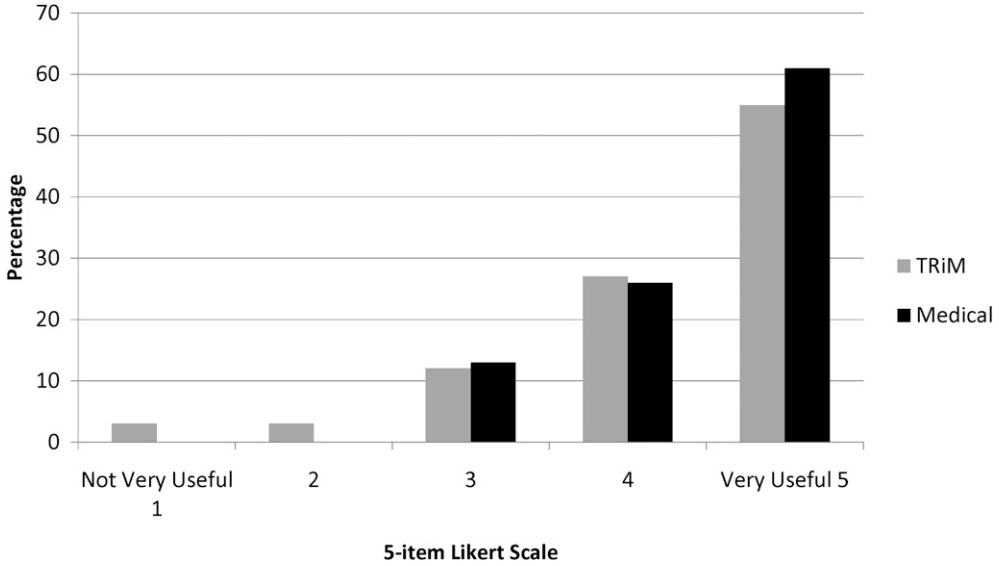

FIGURE 3. Satisfaction with the support provided during the deployment (Standard 6).

to be more vulnerable to the effects of intense pressure may have been more likely to be moved away from their unit to a medical facility. Thus, "stay with their unit" and "evacuated" populations are not necessarily comparable and without a randomized controlled trial (which is unlikely to be granted ethical or chain of command approval), the evidence for the effectiveness of forward psychiatry should be regarded a tentative.[20] However, recent research on British forces found similar results to the original Israeli study in that approximately three-quarters of those individual seen by the FMHT were able to either remain in or return to their forward locations while in theater and had remained in the services 2 years later suggesting that long-term positive outcomes can be expected.1

One concern raised by this audit was that, although there was good awareness of the existence of the FMHT in the combat zone, a number of TRiM personnel were unaware that FMHT staff (in the main military mental health nurses) will assess distressed individuals at forward locations. Given that a primary aim of the FMHT is to deliver forward psychiatry[2] and part of the TRiM process is to promote timely access to appropriate medical help,[6,7] this knowledge deficit may have had a negative impact on the FMHT's mission to maximize operational effectiveness by delivering evidence-based treatment in theater. That said, this effect might be tempered by evidence from this audit that TRiM personnel were aware of a need to signpost distressed personnel who were not recovering to the medical chain (Standard 2). One could hypothesize that, because medical personnel were aware of a need to refer some individuals on to the FMHT (Standard 3), the combined efforts of the medical and TRiM systems would ultimately lead to the right patients being referred to the FMHT although this may not have happened in the most effective and timely manner.

Finally, as a consequence of this study, a number of recommendations can be made. First, this is the first audit to seek assurance of medical and TRiM personnel's corporate knowledge of the FMHT. The original standards were aspirational and may have been set too high. A 90% compliance rate may represent a realistic benchmark for any future audit that TRiM and medical personnel could, reasonably, be expected to achieve. Second, there may be a deficit in TRiM personnel's understanding of the role of the FMHT. Increased emphasis on the FMHT's ability to conduct assessments at forward locations within the TRiM training package may be a resource efficient solution. Auditing a second deployment to see if this has brought about a change would be worthwhile. Third, FMHT personnel strive to ensure that their presence and capability are known to deployed medical and paramedical support services. We suggest that the FMHT exploits opportunities to liaise with TRiM personnel at more forward locations to ensure that this knowledge is widely dispersed. Finally, Royal Navy personnel represented the majority of medical personnel in the combat zone; if this audit were repeated during an army led medical deployment, then any differences could be assessed.

CONCLUSION

A survey of TRiM and medical personnel carried out in the deployed setting found that the roles of the FMHT were generally well understood. This was important because these 2 groups provide an important port of entry to care for psychologically distressed personnel and both can refer to the FMHT for definitive care. The survey also demonstrated a good awareness of how to access the FMHT when necessary. In addition, these groups were satisfied with the FMHT's liaison efforts. This is the first audit of its kind and the results are a benchmark for Ministry of Defence to use as it improves

the way medical and TRiM personnel make best use of the specialist services of the FMHT to improve the care Ministry of Defense provides for its personnel.

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