Executive Summary

- MoD provides an occupational military mental health service, where clinical decisions are safety critical due to the environment in which armed forces personnel operate.

- Statistics provided from defense are accurate, however, trying to contextualise them by comparing them with the wider population is problematic, as the threshold for referral is much lower.

- Only 8% of UK veterans were correctly registered at a PHC practice.

- Military mental health practice is unique, and to understand the issues facing current service provision, the statistical data needs to be annually supplemented with purposeful qualitative data from those working in defence mental health.

- A priority should be afforded to the inclusion of veteran peer researchers within studies to improve sample selection, interpretation and understanding of results.

- There needs to be an agenda to broaden methodological expertise and cooperation within the sector and a move away from a predominately one-dimensional research approach. The only way that the questions in this enquiry will be answered, is through a multiple methods and multiple institution collaboration.

1. Introduction

1.1 Dr Matthew Kiernan and Professor Alan Finnegan are both veterans, with a combined military service of over 50 years’, including 8 years on multiple operational tours. Both served as single service heads of mental health nursing as well as the MODs Defence Specialist Nurse Advisor in Mental Health.

1.2 Dr’s Kiernan and Hill founded the Northern Hub for Veteran and Military Families’ Research at Northumbria University.

1.3 Dr Kiernan is an Associate Professor of Mental Health and Veteran Studies and currently the Chair for Independent Advisory Panel of the British Army Infantry Training Centre, and the Scientific Chair for the EMDR UK & Ireland Association.

1.4 Dr Hill is the Postgraduate Research Director in the Faculty of Health and Life Sciences co-founder of the British Sociological Association Medical Sociology Group (NE).

1.5 Professor Finnegan is Director of the Westminster Centre for Veterans’ Wellbeing and Professor of Nursing & Military Mental Health at the University of Chester. Professor Finnegan has extensive national and international networks. He is a Visiting Professor at the University of South Florida, Birmingham City University and UCLan. Professor Finnegan was the first Professor of Defence Nursing for the British Armed Forces.
2. To what extent do current statistics accurately reflect the level of mental health issues in serving armed forces personnel and veterans, including PTSD?

2.1 The accuracy of statistics in serving and veteran populations are quite different, and therefore this question needs to be broken down and answered separately.

Armed Forces Personnel

2.2 Data is available to accurately identify the number of serving armed forces personnel who access Defence Medical Services (DMS) Primary Healthcare (PHC) and declare a Mental Health (MH) issue. In addition, those referred to Departments of Community Mental Health (DCMH) and admissions to in-patient facilities are also accurately recorded. However, an accurate picture of the issues are only formed when combined with diagnosis, causative factors, presenting symptoms, intervention and help seeking behaviour.

2.3 Details regarding the total number of service personnel referred to a DCMH are accurate, but it is untested regarding how many are appropriate. If we take a snapshot of existing data from the height of the Afghan conflict, 2010/11, UK DCMH’s assessed 5582 new episodes of care, of which 81% (n=4558) were male and the greater proportion being from the Army, (62.8%, n=3504). Of the entire DMCH new case population, 60% (n=3351) had seen service in Afghanistan and/or Iraq. The most prevalent diagnosis was no diagnosable mental illness (31%, n=1379), adjustment disorder (28.6%, n=1599), and depressive disorders (14.9%, n=836). [1].

2.4 Research identified that a significant number of young male Soldiers required a MH assessment as a result of wanting to leave the Army, and their clinical presentation and symptoms was often not the same typically seen in civilian practice, and not correlated to international diagnostic criteria. They described themselves as being trapped, losing control, frustrated, imprisoned with symptoms of violence, physical problems, panic, emotional rigidity, and exaggerated self-criticism [2]. Other pressures cause MH problems in those who have served for several years such as non-Commissioned Officers (NCOs), Senior NCOs and Officers. Senior Officers in particular fear being medically downgraded and may seek help outside the DMS. Of the Armed Forces, 10% are women; although females are over-represented at 16% of hospital admissions.

2.5 The point of note that the authors wish to portray, is that the threshold for care in the military population is very different to that within the wider NHS. MoD provides an occupational military mental health (MMH) service, where clinical decisions are safety critical, due to the environment in which armed forces personnel operate. Therefore, when considering the accuracy of statistics, the headline figures have to be taken into context. A significant proportion are referred because both command and PHC require a specialist occupational MH opinion. Therefore, we would argue that the statistics provided from defense are accurate, however, trying to contextualize them by comparing them with the wider population is problematic, as the threshold for referral is much lower.

Veterans

2.7 There is a lack of detail regarding an individual's MH pathway from discharge to accessing civilian support. Since 1985, the UK has used Read Codes that are applied to a
patient’s PHC medical record to annotate characteristics such as diagnosis, ethnicity, and therapeutic interventions [3]. The UK’s Department of Health directs that a Read Code should be applied to medical documentation indicating a “history relating to military service”. However, there are multiple military Read Codes available for distinctions such as service, i.e. Royal Navy, Army, Royal Air Force or Royal Marine. Whilst Health Education England (HEE) advocate the use of a single Read Code, there is no national agreement on which to apply [4]. In addition, the utilisation of different databases, including those that are not synched, does not facilitate the compatible exporting of data [5]. Even in the UK, where all patients have a unique NHS identification number, there are still differences in the veteran numbering systems used in Scotland and Northern Ireland from that used in England, Wales and the Isle of Man. For those that do register, examination of NHS numbers (through NHS digital) and Read Codes searches should provide an accurate picture of veterans’ demographics and their medical history.

2.8 In 2015, Simpson and Leach reported that only 8% of UK veterans were correctly registered at a PHC practice [6]. This low figure is despite a National Health Service (NHS) website informing veterans of the healthcare benefits and there are no perceived barriers that specifically prevent veterans from registering. Two years later, and despite significant investment in veterans’ health and social care, a recent study indicated little change. However, in a cost effective 6-week intervention this was increased to 26% [7].

3. What are the challenges to accurately assessing the extent of mental health issues in serving armed forces personnel and veterans and how could government improve its understanding of those issues?

Armed Forces Personnel

3.1 The armed forces accurately record the MH issues in serving Armed Forces personnel in those that present at a DCMH. However, the extent to which those MH issues are truly understood is debatable, as statistics alone cannot tell the whole story. The population seen within a military occupational MH service is quite different to that seen within the wider general population. The threshold for referral for MH assessment is much lower and the problems faced tend to be due to situational stressors. A proactive occupational MH service seeks to manage this population through a mixture of advice to commanders, peripatetic clinics, psycho-education as well as traditional treatment. If situational problems are not managed, they will subsequently lead to the development of MH problems due to the nature of military service. The current UK Armed Forces Mental Health Annual Summary present a consistent pattern or MH presentation over time (as described above), with over 25% of all referrals being found to have no mental disorder [8] and neurotic and mood disorders remaining most prevalent.

3.2 It is also important to strategically manage how that data is used and translated into practice. To aid the government in a better understanding of the issues, it is important to ensure those advising the government have an operational understanding of the sector. MMH practice is unique [9] and to understand the issues facing current service provision, the statistical data needs to be annually supplemented with purposeful qualitative data from those working in defence MH. Numbers alone will not provide the requisite insight to adequately address the questions poised in this review. In addition, more could be made of the wealth of experience of recently retired personnel as civilian advisors.
Veterans

3.3 With veteran’s, the understanding and the statistics remain quite poor in differentiating what are service related MH issues, and what are MH issues that the general population experience, but the service user happens to be a veteran. Work undertaken by NHS England has helped improve the use of veteran markers for services such as Improved Access to Psychological Therapies. Such markers provide a good insight into locating areas or hotspots of veteran MH occurrences. The Armed Forces Covenant Grant have commissioned a Map of Need project to better understand many areas of veteran and military family requirements. This project will provide an accurate UK picture built on empirical evidence. It is acknowledged that this work is in its early stages.

3.4 Many studies within the veteran’s community are riddled by poor inclusion and exclusion criteria and a lack of understanding of the veteran community. To alleviate this, a priority agenda should be the inclusion of veteran peer researchers within studies, especially where the research teams have no experience of the armed forces or veteran community.

4. How does the level of mental health issues, services and outcomes in serving armed forces personnel and veterans:

a. Compare both to the actual level in the general population and to public perceptions of mental health issues in armed forces personnel and veterans?

4.1 In the absence of population-level data concerning the health of military veterans, and the general variability in recording service status in health records /statistics, researchers attempting to address these questions rely heavily upon samples drawn from either [a] contrived ‘cohorts’ or [b] veterans actively engaged with military charities.

4.2 How study samples are selected may skew the general UK resident’s view of veteran’s characteristics. For example, Murphy et al [10] reported that veterans ‘actively engaged with the UK charity ‘Combat Stress’ had prevalence rates of MH problems: ‘mental health difficulty’ (82%); ‘problems with anger’ (74%); ‘common mental health difficulties’ (72%); and ‘alcohol misuse’ (43%). This provides a picture of those seeking help from Combat Stress, a mental health charity, and caution is required if generalising such results to the wider ex-service population.

4.3 Woodhead et al. [11], attempted a meaningful comparison between the UK veteran and civilian populations using data from the 2007 ‘Adult Psychiatric Morbidity Survey’ in England. This research concluded that veterans were at no greater risk of MH difficulties than civilian matched controls. However, it should be noted that these conclusions were based upon self-reports from 257 veterans and 504 civilian counterparts. Confidence intervals for prevalence estimates (which would indicate the upper and lower parameters for accuracy within the general population) were not reported. It is notable that these authors avoid making bold claims on the basis of their work.

b. Vary between different groups of serving and former personnel, including reservists, those who have been deployed on operations and early leavers?

4.4 With regulars, a review of 1,030 MMH hospital admission indicated that the distribution of admissions were representative of the Service population with 55% (N=565)
from the Army. Depressive illness was the major reason for a hospital admissions at 38% (N=389). Higher proportions of Army personnel with admitted with adjustment disorders, psychotic illness, PTSD and substance abuse. With alcohol related admission, RN personnel accounted for 30% (N=76) and the RAF 25% (N=63) [12]

4.5 Given the limited availability of valid and reliable knowledge concerning the MH status of the veteran population, it is unsurprising that there have been no large-scale comparative studies considering differences in outcomes between e.g. serving and former personnel, different branches of service, ranks and regular service personnel / reservists. Many studies have attempted to address matters of difference between e.g. branch of service, by means of stratified sampling. For instance, Iverson et al. [14] sample reflected the proportions of regular and reservists deployed during Operation TELIC. The study concluded that there was no health effect of deploying for regular personnel, but an increased risk of PTSD for reservists who deployed as compared to reservists who did not deploy.

4.6 The key concept underlying this question concerns that of (a) attributable versus (b) non-attributable MH outcomes – in other words, establishment of direct causation between the experience of military service and adverse MH outcomes. This complex problem exercises many involved in research into psychotherapeutic interventions who are often at pains to establish that their sample(s) are only comprised of individuals who have been traumatised by their combat experiences, and not by means of non-military attributable traumatic experiences. Childhood adversity and lower childhood socioeconomic status are significantly linked to increased risk of mental illness in later life [14], with traumatic childhood experiences being relatively more common in military populations [11,15]. Barrett [16] reported that of 132 veterans receiving psychological intervention from one military veteran’s service, 63% had experienced significant pre-service trauma, of which: 54% had endured childhood psychological abuse; 40% had been physically abused; 32% could be described as being neglected and 18% had suffered sexual abuse. In order to adequately answer the questions posed, a study design would have to include a statistically meaningful stratified random sample of veterans. The strata would need to reflect branch of service, rank, regular / reservist status, combat exposure / non-exposure, length of service and those with and without adverse MH outcomes.

c. How does the level of mental health issues, services and outcomes in serving armed forces personnel and veterans vary regionally across the UK and across the devolved administrations?

4.7 To determine the relationship between services and outcomes requires a statistically meaningful stratified random sample. With veterans, the Map of Need project involves geospatially mapping those veterans that receive treatment form statutory or 3rd sector MH services. This approach will determine level of MH issues regionally and identify concentrations. Below is an example of a geospatial analysis of veteran use of IAPT service between 2014-2017.
Figure 1 – Referrals received: Veterans.

The three maps on the top show the spatial distribution of the rate of veterans’ referrals received. The areas depicted in red had a higher rate of veterans’ referrals.
4.8 Between 2014 and 2017, it was possible to find four statistically significant (p < 0.05) hotspots with a high rate of veterans’ referrals received. These were on the South West coast, the South East coast, the East Midlands, extending from the coast to Nottingham and in North West’s northernmost area. This analysis provides regional level information e.g. most of the North West had figures for veterans’ referrals 150% above the national trend, i.e. at least 2.5 times more veterans being referred than England’s overall trend. This analysis was undertaken from publicly available data and is ongoing for the devolved administrations.

5. What proportion of mental health issues in veterans is attributable to service in the Armed Forces and how well is this measured and understood?

5.1 MH issues in veterans is poorly understood, and the ability to generalise current data is difficult as it is predominantly reliant on cohort samples with limitations such as: bias due to loss to follow up; and an over reliance on self-reporting. This is problematic in determining cause. There will be instances where those reporting also declare veteran status, without sufficient checks and balances in place to substantiate their claim.

5.2 To determine whether conditions are attributable, there must first be reliable data on the location, frequency and distribution of morbidity in the veteran community throughout the UK, and consistent use of veteran markers or Read Coding is essential. This needs to be reinforced by a re-invigoration of the campaign to routinely ask patients; “Have you or your family served?”.

5.3 Initiatives such as Programme Cortisone\(^1\) will help in the future, however, it will not identify the morbidity of the legacy veteran population. The Map of Need project combined with the research studies in this sector will go some way to determining the answer to this question. However, this will require a collaborative approach, where existing data is shared and collated to present the most accurate picture of MH issues which are attributable to service.

5.4 It is our strong assertion, that no single study will answer this question reliably, it will require a sustained approach, over many years, which is collaborative, and government sponsored.

6. To what extent does the military environment for serving armed forces personnel mitigate against the development of mental health issues?

6.1 To determine the extent to which service in the armed forces is a protective factor against developing Mental Health problems would be very difficult to determine. However, there are elements of military life that provides potential shielding from MH problems. Many service-personnel make a conscientious and informed decision to join the Armed forces and thoroughly enjoy their career. Many from disadvantaged backgrounds can excel and access trades and develop skills that may have eluded them in civilian employment.

\(^1\) Programme cortisone addresses the need to record and archive all medical information generated by the Defence Medical Services (DMS) in producing their mandated outputs.
https://www.gov.uk/government/publications/programme-cortisone
6.2 The military “family” can provide support; helping service personnel deal with many of life’s challenges, and the sense of being part of a bonded team, living in a close community, can be very rewarding.

6.3 With veterans, research suggests that MH issues are higher than the general population [10, 17]. This would suggest that rather than mitigating MH issues, serving in the armed forces is potentially a causative factor of poorer MH compared with the general population. However, with a great deal of recent studies in this field, both with serving and veteran populations, caution should be exercised with regards the risk of selection bias. Many depend on convenience samples, or samples drawn from service MH charities. Quite simply, our current data relies on those that are seeking help, or those that are willing to be contacted to take part in multiple studies on multiple occasions. It is hard to determine whether these are truly representative samples of the veteran or serving population. That said, this is the best intelligence we have at this time and we should look to build on that by broadening the methodological approach, so that we can look to answer these questions more accurately.

6.4 Recent studies into veteran alcohol use would suggest that the resilience which service personnel develop in service forms a strong functional view of health [18], which can be a barrier to help seeking behaviour as a veteran [19]. Therefore, rather than mitigate the development of MH problems, it acts as a barrier when they do begin to have difficulties. Iversen [20] identifies this same issue with regards stigma within the serving population.

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