

<b>Institution:</b> King's College London		
<b>Unit of Assessment:</b> 4		
<b>Title of case study:</b> The mental health of military personnel, veterans and their families: informing policy, interventions and investment		
<b>Period when the underpinning research was undertaken:</b> 2000 – 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Nicola T Fear	Professor of Epidemiology	From 01/09/2004
Simon Wessely	Programme Director	From 01/04/1991
Roberto J Rona	Professor of Public Health	01/06/2008 – 31/12/2020
Norman Jones	Research Fellow	From 01/04/2012
Neil Greenberg	Professor of Defence Mental Health	From 01/01/1996
Sharon Stevelink	Senior Lecturer	From 10/09/2012
Deirdre MacManus	Clinical Reader	From 05/08/2009
Laura Rafferty	Postdoctoral Researcher	From 12/01/2016
<b>Period when the claimed impact occurred:</b> 2014 – 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		

## 1. Summary of the impact

King's Centre for Military Health Research (KCMHR) is the main source of independent high-quality data on the mental health and wellbeing of the UK Armed Forces, both serving and ex-serving. King's research has had three groups of impacts. First, by providing ongoing epidemiological data from a major cohort of military personnel we have contested the media led stereotype that those who have served are "mad, bad and sad". This narrative can be damaging to the health and wellbeing of personnel, reduces their employment prospects, and increases stigma. Countering it is a key government policy objective, for which data from KCMHR are the most important resource. This is synergistic with our second impact - by describing areas of genuine unmet need, our research has changed government policy to ensure greater support, including access to care for personnel, veterans and their families. Third, by providing evidence on the effectiveness or otherwise of specific interventions we have changed policy decisions, including those on post-deployment screening and women holding combat roles.

## 2. Underpinning research

King's research into military mental health is recognised as world leading: scientometric analyses showed that King's researchers Wessely, Greenberg & Fear were the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> highest contributors to the wider field of military health research.

**King's has conducted health surveillance of military personnel.** Since 2004, King's has conducted a representative longitudinal cohort study of more than 8000 UK military personnel, including those who have left the service, which has addressed health and well being outcomes of those who were deployed to Iraq and Afghanistan. We have published over 350 papers using data from this study. Our research has consistently shown that the vast majority of those who have served do not experience mental health problems before or after service, and that the much predicted "tsunami" of such problems has not occurred. However, in the third "sweep" of the cohort conducted in 2015-17, we highlighted an overall modest increase in PTSD (from 4% to 6%), with the greatest increase in the ex-serving personnel who had previous experience of combat deployments to Iraq or Afghanistan (17%), highlighting the importance of ongoing support following discharge from military service **(1)**.

**King's research has identified frequency and patterns of offending in military personnel.**

There have been frequent reports of ex-serving military personnel being imprisoned, contributing to stigmatisation by adding to the “bad” of the “mad, bad, sad” narrative sometimes used about this group. Using the first record linkage of its kind using military personnel records and national crime records, we were able to demonstrate that overall age-standardised convictions and incarceration (1.7% versus 7.0%) were lower in the military cohort than in the general population (2). However our data also drew attention to the exception – an increase in violent offending, particularly in younger age groups, which was directly linked to traumatic combat exposure and mediated by alcohol misuse and PTSD.

**King's provided evidence on the changing nature of help seeking.** King's research on barriers to care assessed help-seeking behaviours in 1,450 military personnel and veterans who reported symptoms of mental disorder (3). We were able to show a steady increase in help seeking over the lifetime of the cohort, such that in the latest data 55% percent had accessed medical support, whilst 86% had used informal support, countering the popular belief that personnel are more reluctant than other groups to seek help. However, there are still barriers to help-seeking, the commonest being the view that *“I can or should be able to manage this myself”*. For some, seeking help came only after reaching a crisis point. Having a strong social network that encourages help-seeking and the media's increased discussions around mental health were positive influencers on the decision to seek support. King's qualitative research showed that barriers may change over time and depending upon an individual's circumstances, highlighting the importance of understanding barriers to help-seeking when designing mental health services (4).

**King's research has highlighted the importance of supporting military families.** King's conducted the first systematic research on the impact of service on military families including potential adversities such as mobility, absence through deployments, threat of, and actual, physical injury and the psychological effects of deployment on service personnel. We studied the combined effects of these factors on spouses, partners and children's mental health and wellbeing. It had long been assumed, based on anecdotes, that frequent deployment of a parent, usually the father, was responsible for the known excess in military families of “problem children”, or those identified as having special educational needs. We provided the first evidence that this was untrue. Instead, it was linked to serious illness or injury of service personnel which had a profound impact on families, including poor mental health, relationship pressures, employment and financial pressures, and burden placed on children to support and provide care. We also found inconsistent knowledge and access to support services, identifying gaps in provision for military families (5).

**King's has evaluated how changes in policies being proposed by the Ministry of Defence affect mental health.** There has been debate about the use of screening to identify mental disorders following deployment – a practice which is routine in USA, Australia and Canada but has not been implemented in the UK. We first showed that pre-deployment screening carried out before deploying personnel to Iraq did not reduce post deployment mental health problems, and instead had unintended consequences for both individuals and the Armed Forces, particularly for “false positives”. However the question of post-deployment screening, as practised by many nations, remained open. In 2017, King's delivered the first ever cluster randomised controlled trial of post deployment mental health screening anywhere on a large sample of UK Armed Forces personnel recently returned from combat deployment in Afghanistan. The study, funded by the US Department of Defense, found conclusively that screening did not improve mental health outcomes (depression, anxiety, PTSD and alcohol misuse) and was also not effective at improving help-seeking (6).

The UK Armed Forces have debated the role of women in “ground close combat” (WGCC) roles. One key to policy change is whether such roles would be associated with unacceptable increase in psychiatric injury among women exposed to such duties. In 2017, King's researched this question, including the impact of combat exposure and impact on help-seeking should the WGCC policy be implemented. The research concluded that rates of PTSD in women in combat roles was no different to that seen in men, and only minor changes to support requirements would be needed for women undertaking the ground close combat role (7).

### 3. References to the research

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1. **Stevelink, S.A.M., Jones, M., Hull, L., Pernet, D., MacCrimmon, S., Goodwin, L., MacManus, D., Murphy, D., Jones, N., Greenberg, N., Rona, R.J., Fear, N.T. and Wessely, S.** (2018). Mental health outcomes at the end of the British involvement in the Iraq and Afghanistan conflicts: a cohort study *Br J Psych*, 213, 690–697. DOI: 10.1192/bjp.2018.175
2. **McManus, D., Dean, K., Jones, M., Rona, R.J., Greenberg, N., Hull, L., Fahy, T., Wessely, S., Fear, N.T.** (2019). Violent offending by UK military personnel deployed to Iraq and Afghanistan: a data linkage cohort study. *The Lancet*, 381, 907-917. DOI: 10.1016/S0140-6736(13)60354-2
3. **Stevelink, S.A.M., Jones, N., Jones, M., Dyball, D., Khera, C.K., Pernet, D., MacCrimmon, S., Murphy, D., Hull, L., Greenberg, N., MacManus, D., Goodwin, L., Sharp, M.L., Wessely, A., Rona, R.J., Fear, N.T.** (2019). Do serving and ex-serving personnel of the UK armed forces seek help for perceived stress, emotional or mental health problems? *Europ J Psychotraumatology*, 10,1. DOI: 10.1080/20008198.2018.1556552
4. **Rafferty, L.A., Wessely S., Stevelink, S., Greenberg, N.** (2020). The journey to professional mental health support: a qualitative exploration of the barriers and facilitators impacting military veterans' engagement with mental health treatment *European Journal of Psychotraumatology*, 10 (1), 1700613. DOI: 10.1080/20008198.2019.1700613
5. **Fear, N.T., Reed, R.V., Rowe, S., Burdett, H., Pernet, D., Mahar, A., Iversen, A.C., Ramchandani, P., Stein, A. and Wessely, S.** (2018). Impact of paternal deployment to the conflicts in Iraq and Afghanistan and paternal post-traumatic stress disorder on the children of military fathers. *Br J Psych*, 212, 347-355. DOI: 10.1192/bjp.2017.16
6. **Rona, R.J., Burdett, H., Khondoker, M., Chesnokov, M., Green, K., Pernet, D., Jones, N., Greenberg, N., Wessely, S. and Fear, N.T.** (2017). Post-deployment screening for mental disorders and tailored advice about help-seeking in the UK military: a cluster randomised controlled trial. *The Lancet*, 389, 1410-1423. DOI: 10.1016/S0140-6736(16)32398-4
7. **Jones, N., Greenberg, N., Phillips, A., Simms, A., & Wessely, S.** (2019). British military women: combat exposure, deployment and mental health. *Occupational Medicine*, 69, 549–558. DOI: 10.1093/occmed/kqz103

### 4. Details of the impact

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**King's research has informed high level policy on military mental health.** Since the REF2014 case study that described the early post-deployment interventions influenced by King's research, our work has been used extensively to inform Government policy on the mental health and wellbeing of serving and ex-serving personnel and their families. It has further informed the charity sector in terms of their advocacy and service provision. The key Government strategy, *Defence People Mental Health and Wellbeing Strategy 2017-2022* [A1] was influenced by King's research over several years [A2]. The 350 plus papers from the King's cohort study (e.g. 1, 2) collectively comprise the majority of evidence used to support top level policy making by the UK Ministry of Defence on military mental health and wellbeing [A3, A4].

In 2014/2015 the House of Commons Defence Select Committee (HCDC) scrutinised the way that Government strategies uphold the military covenant in relation to those injured, mentally or physically, as a result of military service. The resulting HCDC report: *Armed Forces Covenant: Military Casualties* was informed by King's research into the long-term mental health trajectories of military personnel. King's researchers gave oral and written evidence [A5]. The Committee concluded that whilst the UK provides world-class care to injured serving personnel, there was concern about the support provided for those developing or living with longer-term physical, mental and neurological conditions. This was one of five HCDC sessions on various topics where King's researchers were invited to give evidence.

The Parliamentary Office of Science and Technology (POST) produced a POSTnote [A6] based on the conclusions of the 2014/15 HCDC report indicating that the needs of military personnel who may be suffering long term conditions should be addressed. This cited King's research 35 times, and informed policy makers of trends and mental health needs in the military population.

King's research underpinned the *Defence People Mental Health and Wellbeing Strategy 2017-2022* [A1] which set the scene for Government policy on mental health and wellbeing. Of the 31 peer-reviewed academic papers used to support the strategy, 27 were produced by King's. The Strategy covers all aspects of military mental health, including help-seeking, stigma, deployment mental health, Reserve Forces mental health, child and family health, trauma risk management and the effect of "overstretch". All these recommendations were underpinned by King's research [A2, A3, A4]. The Strategy also led to the establishment of the Office of Veterans Affairs (OVA) within the Cabinet Office [A7, A8], which continues to support the ongoing King's Military Cohort, now renamed the Legacy Cohort, since most of its members have now left the Armed Forces. It remains the most trusted source of data on health and wellbeing of veterans of the conflicts in Iraq and Afghanistan, and was recently accessed for a rapid investigation into how COVID-19 has affected military veterans [A9]. Wessely now sits on the new Veterans' Board formed in 2020 which oversees the provision of services to military personnel and veterans, and the health and wellbeing of military families [A10].

**King's research has informed advocacy by groups representing military personnel.**

Several military charities have benefited from King's research ensuring an evidence-base both for their advocacy and for the services they provide. For example: the Royal British Legion's response to NHS England's consultation on "Developing mental health services for veterans in England" [B1] is informed by the research which they commissioned King's to carry out [B2]. Also, the Forces in Mind Trust (FiMT) Policy Statement on Health [B3] is influenced by King's research into stigma and the barriers to help-seeking [B4].

**King's research has reduced stigma around military mental health.** King's research (e.g. 2) has reduced harmful stigmatising views of military personnel, veterans and their families, and has, as the NHSE Director responsible for the Armed Forces services explained, "*helped counter the sometimes negative impact of the stereotype of veterans as being 'mad, bad and sad'*" [C].

**King's research provided evidence leading to improvements and investment in a new initiative providing NHS mental health services for military personnel.** By demonstrating the extent of mental health needs within the military, and the barriers to seeking help in this population, King's research led to NHS England (NHSE) committing to developing services dedicated to veteran mental health and an annual increase in funding for these services [A8]. The research informed the consultation that began this process and the subsequent action plan in 2016 [e.g. B1]. Finally, our research informed the formation of the Transition, Intervention, Liaison Service (TILS) in 2017 [C]. TILS supports military personnel through their discharge from military service and into their life as a veteran, linking the MoD, NHS and community-based care to reduce the barriers to help-seeking. The service supports specific stages of the veteran experience: transitioning towards being discharged from service, at which stage support is co-ordinated with the MoD; intervention by NHS complex treatment services for those found to need them at pre-discharge assessment, and liaison within community-based care, for long term support specifically designed for veterans without complex treatment needs [e.g. D]. King's research (2) has also enabled focus on a specific area of concern – the increased rate of violent offending in those exposed to combat, and the suggested key targets for intervention – mental health and substance misuse.

**King's research has informed Government policy on the health of service families.**

In 2019 the Secretary of State for Defence asked Andrew Selous MP to conduct an independent review to consider the diverse needs of service families, assess whether the current support offer is meeting these needs, and make recommendations accordingly, resulting in the *Living in Our Shoes* report [E1, E2]. King's research (e.g. 5) underpins Chapter 6 of this report and its Recommendation 74 to promote better mental health and wellbeing for the whole family.

**King's research has enabled evidence-based decisions across diverse policy areas.**

King's work on post-deployment mental health screening (6) shaped the UK's decision to not implement this intervention on the basis that it was not effective [A2]. Also, our research (7)



## Impact case study (REF3)

finding that PTSD rates were no higher in deployed female military personnel informed the Ministry of Defence policy decision to lift the ban on women in Ground Close Combat roles in 2016 [F1, A2]. This research also informed the preparation of the minor additional support services needed to support the potential elevation in help-seeking from women.

### 5. Sources to corroborate the impact

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#### **[A] Sources to corroborate the impact of King's research on UK government policy**

A1 Defence People Mental Health and Wellbeing Strategy, 2017 - 2022

A2 Testimonial from The Rt.Hon.Tobias Ellwood MP, Chair of House of Commons Defence Select Committee, previously Parliamentary Under Secretary of State for Defence Veterans, Reserves and Personnel

A3 Testimonial from Lt Gen Richard Nugee, previously Defence Services Secretary and Chief of Defence People at the UK Ministry of Defence

A4 Testimonial from Helen Helliwell, Director of the Armed Forces People Policy at the UK Ministry of Defence

A5 House of Commons Defence Select Committee report, Armed Forces Covenant: Military Casualties, 2014

A6 POST note, 2016

A7 Office for Veteran's Affairs Factsheet, 2020

A8 Testimonial from Parliamentary Under-Secretary of State for Defence People and Veterans Johnny Mercer MP

A9 Announcement on UK Government website from Office for Veteran's Affairs of initiative to understand the impact of COVID-19 on veterans using King's Legacy Cohort, 2020

A10 Membership of the Veterans Advisory Board, 2020

#### **[B] Sources to corroborate how King's research has supported advocacy from groups representing military personnel**

B1 Royal British Legion response to NHS England consultation "Developing mental health services for veterans in England", 2016

B2 Testimonial from Charles Byrne of Royal British Legion

B3 Forces in Mind Trust Policy Statement on Health

B4 Testimonial from Ray Lock, Chief Executive of Forces in Mind Trust

#### **[C] Testimonial from Kate Davies CBE, Director of Health and Justice, Armed Forces and Sexual Assault Referral Centres, NHS England.**

#### **[D] Veterans' Mental Health Transition, Intervention and Liaison (TIL) Service London and South East webpage (other regions available)**

#### **[E] Sources to corroborate the impact of King's research on government policy on the health of military families**

E1 Living in Our Shoes report, 2020

E2 Testimonial from Professor Janet Walker, Lead Advisor to Living in Our Shoes report

#### **[F] Sources to corroborate King's research evidencing diverse policy decisions**

F1 Government announcement on women in close ground combat, 2016