What are the mental health consequences of deployment to Iraq & Afghanistan for UK Armed Forces personnel?

Professor Matthew Hotopf
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King’s College London
For whom the battle still rages

Post-traumatic stress disorder can strike immediately or decades after a soldier has left the combat zone. The Iraqi conflict will certainly bring many new victims but there is little help at hand.

By Decca Aitkenhead

The Gardens of Tyrwhitt House are velvety soft and emerald green in the sunshine. Men amble alone across the lawns, and gather on shaded benches, sipping tea and talking quietly. From a distance, they could be hotel guests, except that a number are wearing pyjamas. They are shy at first, edgy, with a nervous anger twitching in their fingers and, as they talk, it becomes clear that something is very wrong for all of them.

Tyrwhitt House is a residential treatment centre in Surrey for ex-service men and women suffering from post-traumatic stress disorder (PTSD). All fought on the winning side and most display pride in their service by the very way they move. But there are no use to the Army any more; this where some of the men who’ve been fighting in the most recent conflict of the Gulf will inevitably end up.

Rupert Williams fought in the 1990 Gulf war. Just 30, he arrived for the first time last week and is sitting alone on the grass, his body lifeless but stiff. He signed up at 16 for the usual reasons – broken home and a suggestion from the careers office – and at 17 was sent to Germany. His was a violent battalion. Boy
KCMHR Health of Military Personnel Study

- Random selection of:
  - TELIC 1 personnel
  - non-deployed serving personnel

- Sample includes:
  - All three Services (excluding Special Forces)
  - Regulars and reservists
  - Men and women

- Self-completion questionnaire

- Data collection period: June 2004-March 2006

- Response rate = 61% (n=10,272)
Are there any health effects of deployment?

- Poor health
- Symptoms
- Alcohol
- Fatigue
- Post traumatic stress
- General mental health

**Era**

**Regulars only**

Are there any health effects of deployment?

- General mental health
- Post traumatic stress
- Fatigue
- Alcohol
- Symptoms
- Poor health

Percentage cases

Reservists only

Era
TELIC


King’s Centre for Military Health Research
Iraq reservists 'need more help'  

Half of all Iraq war veterans seeking help for mental illness are Territorial Army soldiers, despite making up only 10% of deployments, a charity says.

Combat Stress blamed a rise in those seeking help partly on a shortage of NHS skills and a lack of MoD support.

Some 25 reservists currently account for 50% of its referrals, it says.
More people in UK Armed Forces drink at hazardous levels than civilian population.
But the war in Iraq didn’t end & the UK commitment to Afghanistan increased….
What are the consequences of deployment to Iraq and Afghanistan on the mental health of the UK armed forces? A cohort study

Nicola T Fear, Margaret Jones, Dominic Murphy, Lisa Hull, Amy C Iversen, Bolaji Coker, Louise Machell, Josefin Sundin, Charlotte Woodhead, Norman Jones, Neil Greenberg, Sabine Landau, Christopher Dandeker, Roberto J Rona, Matthew Hotopf*, Simon Wessely*

Lancet, 2010, available online (13th May 2010)
Who is in Phase 2?

- **Phase 1 participants:** All those who participated at phase 1 and have consented to follow-up

- **Replenishment sample:** To ensure our study is representative of those currently serving in the UK Armed Forces (regular and reserve personnel who have joined the trained strength between 29th April 2003 and 1st April 2007)

- **HERRICK sample:** To ensure a sufficient sample size to describe the health of veterans of the Afghanistan deployments (randomly selected sample of regular personnel and all reserve personnel who have served on Op HERRICK 4 or 5)
Response rates

- 9990 subjects responded (response rate = 56%)
  - follow-up sample: 68%; replenishment sample: 40%; HERRICK sample: 50%

- Response was associated with:
  - older age, being female, being an officer & being a regular (HERRICK and replenishment samples)

- For the follow-up sample, response was not associated with phase 1 health status
## Overall prevalence of outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Overall, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(95% confidence interval)</td>
</tr>
<tr>
<td>Probable PTSD</td>
<td>4.0%</td>
</tr>
<tr>
<td></td>
<td>(3.5%-4.5%)</td>
</tr>
<tr>
<td>Common mental disorder</td>
<td>19.7%</td>
</tr>
<tr>
<td></td>
<td>(18.7%-20.6%)</td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td>13.0%</td>
</tr>
<tr>
<td></td>
<td>(12.2%-13.8%)</td>
</tr>
</tbody>
</table>
Aim 1: Legacy of deployment

The health of UK military personnel who deployed to the 2003 Iraq war: a cohort study

Matthew Hotopf, Lisa Hull, Nicola T Fear, Tess Browne, Oded Horn, Amy Iversen, Margaret Jones, Dominic Murphy, Duncan Bland, Mark Earnshaw, Neil Greenberg, Jamie Hacker Hughes, A Rosemary Tate, Christopher Dandeker, Roberto Rona, Simon Wessely
Prevalence of outcomes - *regulars*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Non-deployed (41.1%)</th>
<th>Deployed (58.9%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probable PTSD</td>
<td>4.0%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Common mental disorders</td>
<td>19.9%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td>10.9%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Outcome</td>
<td>Non-deployed (59.9%)</td>
<td>Deployed (40.1%)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Probable PTSD</td>
<td>1.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Common mental disorders</td>
<td>18.1%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td>6.8%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>
Aim 1: Legacy of deployment

- The role of combat
Prevalence of outcomes by role for those deployed (regulars)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Combat (25.0%)</th>
<th>Combat support (12.0%)</th>
<th>Combat service support (63.1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probable PTSD</td>
<td>6.9%</td>
<td>2.1%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Common mental disorders</td>
<td>20.6%</td>
<td>18.3%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td>22.5%</td>
<td>10.8%</td>
<td>14.2%</td>
</tr>
</tbody>
</table>
Aim 2: Impact of multiple deployments
OVERSTRETCHED
AND OVER THERE
Mental health
after deployment
Deploying above Harmony Guidelines impacts on PTSD

<table>
<thead>
<tr>
<th>Months deployed in 3 years</th>
<th>% PTSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>3</td>
</tr>
<tr>
<td>5 to 8</td>
<td>3</td>
</tr>
<tr>
<td>9 to 12</td>
<td>4</td>
</tr>
<tr>
<td>&gt;12</td>
<td>5</td>
</tr>
</tbody>
</table>
Number of deployments – currently serving Army regulars

Proportion

Symptoms of PTSD  Common mental disorders  Alcohol misuse

1  2  3+

0  0.05  0.1  0.15  0.2  0.25
Aim 3: Impact of time since return from deployment

Source: Land Combat Study (Hoge & Castro)
Post-traumatic Stress Disorder (PTSD):
the management of PTSD in adults and children in primary and secondary care

Clinical Guideline
Published: March 2005
Review: March 2009

Fig. 7.1 Post-traumatic stress disorder (PTSD) ‘caseness’ of patients directly involved in a raid (x, weeks post-trauma; y, PTSD % caseness).
Data from Richards (1997).
Time since last deployment

![Graph showing the proportion of symptoms of PTSD, common mental disorders, and alcohol misuse over different time periods since return from deployment.](image)
Time since last deployment
In Summary….

– Despite everything that has happened since 2005 the overall mental health of the UK Armed Forces remains stable

– Alcohol misuse is a bigger problem than probable PTSD

– Deployment is still associated with probable PTSD in reserves, but also alcohol misuse in regulars

– Deployment associated with probable PTSD for those in combat roles

– Still no association with the number of deployments

– Weak relationship between time since return from deployment and probable PTSD but not of the same magnitude as that observed by the US.