Post-traumatic stress disorder in UK and US forces deployed to Iraq

Matthew Hotopf and colleagues (May 27, p 1731)1 present the results of an elegant study of the mental health of UK military personnel who deployed to the 2003 Iraq war. The most notable finding was the strikingly lower rate of post-traumatic stress disorder (PTSD) among UK personnel compared with our report² from US military personnel (4% vs 13%, respectively). Although Hotopf and colleagues discuss various possible reasons for this difference, they play down the most important one, which is the frequency and intensity of combat.

The degree of combat engagement reported by UK personnel operating mainly in the south of Iraq was far lower than among US personnel operating in the north and central regions. Although it is true that more than half of service members from both the UK and USA reported coming under mortar or artillery attack, this comparison does not reflect the large differences in direct combat experiences reported in these studies. For example, only 17% of UK service members reported discharging their weapon, compared with 77-87% of US service members; 32% of UK service members reported coming under small arms fire, compared with more than 90% of US service members; 15% of UK service members reported body handling experiences, compared with more than 50% of US service members; and 25% of UK service members reported seeing allied persons wounded or killed compared with 65-75% of US service members.

Also, it is likely that there were differences in the number of combat events during deployment. In the US study, stratification by the number of firefights resulted in rates of PTSD being very similar for soldiers who

deployed to Iraq compared with soldiers who deployed to Afghanistan, where combat intensity (and overall PTSD prevalence) was much more similar to the UK experience.²

Combat is much more likely to be the most important correlate with PTSD prevalence in these two studies than "cultural and organisational differences" as suggested by Hotopf and colleagues.

We declare that we have no conflict of interest.

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- 1 Hotopf M, Hull L, Fear NT, et al. The health of UK military personnel who deployed to the 2003 Iraq war: a cohort study. Lancet 2006; 367: 1731-41.
- Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. N Engl J Med 2004; 351: 13-22.

Author's reply

We agree with Charles Hoge and Carl Castro that the US forces are engaged in serious combat duties in Iraq, and that exposure to combat is a clear risk factor for post-traumatic stress disorder (PTSD). However, if we assume that casualties are the best marker of combat intensity, UK casualty rates would be expected to mirror those of PTSD and be three to five times lower than US rates. Although the absolute number of UK casualties is indeed far lower than for the US forces, we do not have sufficient information on denominators to calculate casualty rates. We doubt, however, that the difference between forces is as great as three to five times.

Trauma is not the only factor associated with PTSD. Indeed, contextual factors (including lack of social support, other stressors, and adverse childhood experiences) are at least as strongly associated with PTSD as trauma severity.¹ The different composition of the two armed forces, with the USA using

younger personnel who were less accustomed to deployment and more reservists, and the USA deploying for longer, could all affect rates of PTSD. We accept that our suggestion about differences in health-care systems when veterans return home is speculation, but we are not alone in making such speculations.

Hoge has provided us with much appreciated advice with our study, which enabled us to ensure that many of our variables are directly comparable with those in the US studies. As a consequence, it would be possible to see whether the differences we report are solely the result of differences in combat exposure by analysing the two datasets, suitably anonymised, together. We would be delighted to join forces for such a study.

SW is honorary civilian consultant adviser to the British Army. MH, NF, LH, and RR have no conflict of interest to declare.

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Is there an Iraq war syndrome?

Oded Horn and colleagues (May 27, p 1742)¹ find no increase in common symptoms in UK servicemen deployed to the 2003 war in Iraq, compared with a significant increase in those involved in the 1991 Gulf war. They consider possible reasons for the difference, but come to no conclusion. I suggest one possible factor which they do not mention.

The symptoms reported after the 1991 conflict, although common and non-specific, are strikingly similar to those reported by farm workers exposed to organophosphate insecti-

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