

## Going to war does not have to hurt: preliminary findings from the British deployment to Iraq

JAMIE HACKER HUGHES, FIONA CAMERON, ROD ELDRIDGE,  
MADELEINE DEVON, SIMON WESSELY and NEIL GREENBERG

**Summary** We carried out a brief longitudinal mental health screen of 254 members of the UK's Air Assault Brigade before and after deployment to Iraq last year. Analysis of General Health Questionnaire (GHQ–28) scores before and after deployment revealed a lower score after deployment (mean difference=0.93, 95% CI 0.35–1.52). This indicated a highly significant relative improvement in mental health ( $P < 0.005$ ). Moreover, only 9 of a larger sample of 421 (2%) exceeded cut-off criteria on the Trauma Screening Questionnaire. These findings suggest that war is not necessarily bad for psychological health.

**Declaration of interest** J.H.H., F.C., R.E., M.D. and N.G. are employed by Defence Medical Services; S.W. is Honorary Civilian Adviser in Psychiatry (unpaid) to the British Army Medical Services.

In a recent paper, Hoge *et al* (2004) reported that US personnel who were deployed to Iraq reported poorer mental health after the campaign than before (Spurgeon, 2004). Their results were taken from cross-sectional surveys before and after deployment. We performed a brief longitudinal mental health screen of members of the UK's Air Assault Brigade before and after deployment to Iraq last year. In this paper we report our preliminary findings.

### METHOD

Of a possible 899 soldiers, 733 participated in this survey (82% of the available population, compared with 58% for Hoge *et al*,

2004). The brigade commander supported the project; individuals participated voluntarily and gave signed consent. The protocol was approved by the Defence Medical Services Clinical Research Committee.

Questionnaires were circulated at the end of pre-deployment mental health briefings (standard in UK units' preparations for operational deployments). Soldiers were informed that military mental health practitioners would contact them confidentially if results revealed cause for concern. Participants were told that commanders would be informed only about pooled results.

The ages of responders ranged from 17 to 48 years and 71 of the entire sample (8%) were female. The sample was surveyed before deployment using the General Health Questionnaire (GHQ–28) (Goldberg & Hillier, 1979). All those with scores exceeding 20 ( $n=16$ ) were contacted and offered support.

After war-fighting operations were complete, personnel returned to the UK having been in theatre for approximately 4 months.

### RESULTS

Questionnaires, which included the GHQ–28 and the Trauma Screening Questionnaire (TSQ; Brewin *et al*, 2002), were then sent to participants. One month after return, 421 of the original sample of 899 completed the questionnaires. The sample size was lower than before deployment (as with Hoge *et al*, 2004) because many personnel had been redeployed or were on leave. (It is highly unlikely that this loss to follow-up was attributable to illness as very few diagnoses of post-traumatic stress disorder were eventually made across all three branches of the British Armed Forces following the Iraq deployment.)

Non-responders did not differ from responders on pre-deployment measures ( $t=-1.01$ ,  $P=0.31$ ). The mean score on

the GHQ–28 was 1.94. Results showed that 2% ( $n=9$ ) exceeded cut-off criteria on the TSQ (contrasting with 12% reported by Hoge *et al*), with a further two soldiers scoring over 20 on the GHQ–28. All were contacted individually and offered support.

Overall, 35% of the original sample ( $n=254$ ) completed both sets of questionnaires. The high turnover of personnel observed between the two occasions was a combined result of postings to new units, redeployment, leave and attendance at training courses. Also, participation at both stages was voluntary. In addition, whereas the first set of questionnaires was administered during routine pre-deployment training, the follow-up questionnaires were administered internally on a sub-unit basis, which may have contributed to the reduced follow-up sample size. It is not, however, believed that the reasons for the reduced sample size would have affected validity.

Analysis of the GHQ–28 scores before and after deployment revealed a highly significant ( $t=3.15$ ,  $P < 0.005$ ) relative improvement in mental health. This was indicated by lower GHQ–28 scores which showed a mean difference of 0.93 (95% CI 0.35–1.52). These findings raise the question of whether military deployment is necessarily bad for psychological health.

### DISCUSSION

The principal finding of this preliminary study was a lack of deterioration in the mental health of British soldiers deployed to Iraq. This is in contrast to the recent well-publicised findings of Hoge *et al* (2004). Why do our results differ? The units studied by Hoge *et al* and ourselves were all front-line units with reputations for military competence. Our measures were administered 1 month after return whereas those used by Hoge *et al* were administered 3–4 months after return from theatre. However, post-deployment associated psychological distress is likely to reduce over time (Greenberg *et al*, 2003), rather than the converse. It is recognised, however, that we did not at that time have any baseline prevalence measures using the GHQ with British Armed Forces against which these results might be compared. Also, whereas we used different measures to Hoge *et al*, we think it implausible that this would account for the considerable differences. A final factor might be the different areas of the country in which British

and US troops were deployed and the differences in fighting in which they were involved, reflected in the higher number of US casualties, both physical and psychological.

Our results show that it is premature to conclude that the Iraq war has already had a serious adverse effect on the mental health of the armed forces, or that we are inevitably facing a repeat of the Vietnam story (Wessely & Jones, 2004). This study also reminds us that where there are highly selected forces with high morale involved in focused operations with positive outcomes, whatever the immediate political context, participation in war fighting may sometimes not necessarily be as deleterious to psychological well-being as has previously been thought.

## ACKNOWLEDGEMENTS

We thank Stewart Neale, RMN, Community Psychiatric Nurse, and Michael Srinivasan,

JAMIE HACKER HUGHES, PsychD, FIONA CAMERON, RMN, ROD ELDRIDGE, RMN, MADELEINE DEVON, MSc, Defence Medical Services, Department of Community Mental Health, Colchester, SIMON WESSELY, FRCPsych, NEIL GREENBERG, MRCPsych, King's Centre for Military Health Research, London, UK

Correspondence: Dr Jamie Hacker Hughes, Senior Lecturer, Academic Centre for Defence Mental Health, King's Centre for Military Health Research, Institute of Psychiatry, King's College London, Weston Education Centre, Cutcombe Road, London, SE5 9RJ, UK. E-mail: j.hacker-hughes@iop.kcl.ac.uk

(First received 14 September 2004, final revision 25 February 2005, accepted 3 March 2005)

MRCPsych, Consultant Psychiatrist, Department of Community Mental Health, 16 Air Assault Brigade and Colchester Garrison.

## REFERENCES

**Brewin, C. R., Rose, S., Andrews, B., et al (2002)**

Brief screening instrument for post-traumatic stress disorder. *British Journal of Psychiatry*, **181**, 158–162.

**Goldberg, D. & Hillier, V. (1979)** A scaled version of the General Health Questionnaire. *Psychological Medicine*, **9**, 139–145.

**Greenberg, N., Maingay, B., Iversen, A., et al (2003)** Perceived psychological support of UK military

peacekeepers on return from deployment. *Journal of Mental Health*, **6**, 565–573.

**Hoge, C. W., Castro, C. A., Messer, S. C., et al (2004)**

Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. *New England Journal of Medicine*, **351**, 13–22.

**Spurgeon, D. (2004)** Fear of stigma deters US soldiers from seeking help for mental health. *British Medical Journal*, **329**, 12.

**Wessely, S. & Jones, E. (2004)** Psychiatry and the 'lessons of Vietnam': what were they and are they still relevant? *War and Society*, **22**, 89–103.