Combat exposure increases risk of alcohol misuse in military personnel following deployment

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QUESTION

Question: How does combat exposure affect alcohol consumption, binge drinking behaviour and other alcohol related problems in US military personnel?

People: 48,481 people enrolled in the Millennium Cohort Study. Exclusions: missing demographic or other covariate data; did not answer alcohol outcome questions; deployed to Iraq or Afghanistan before baseline assessment; or took survey while deployed.

Setting: Military service personnel, USA; recruitment July 2001 to June 2003.

Risk factors: Combat exposure during deployment, defined as: personally witnessing a person’s death due to war, disaster of tragic event; witnessing physical abuse; or seeing dead or decomposing bodies, maimed soldiers or civilians, or prisoners of war or refugees.

Outcomes: New onset of heavy weekly drinking, binge drinking or alcohol related problems among people with no reported alcohol outcomes at baseline; increased heavy weekly drinking, binge drinking or alcohol related problems among people reporting alcohol outcomes at baseline. Heavy weekly drinking was defined as more than 14 drinks/week for men or more than 7 drinks/week for women. Binge drinking was defined as drinking 5 or more drinks for men or 4 or more drinks for women on at least 1 day of the week or on at least 1 day/occasion per year. Alcohol related problems were defined as a positive response to one or more of the five alcohol related measures on the Patient Health Questionnaire.

METHODS

Design: Prospective cohort study.

Follow-up period: On average 1 year after return from deployment.

MAIN RESULTS

Of the 48,481 participants, 5,510 experienced combat exposure during deployment, 5,661 experienced no combat exposure during deployment and 37,310 were not deployed (26,613 were in active duty and 21,868 in the Reserves or National Guard). During follow-up, new onset heavy weekly drinking, binge drinking and alcohol related problems were more common among those who were deployed and had combat exposure than those who were not deployed (see table 1). Combat exposure significantly increased the risk of all new onset alcohol outcomes among Reserve and National Guard personnel, but among active duty personnel, only significantly increased the risk of new onset binge drinking (see online table 2).

CONCLUSIONS

Combat exposure increases heavy weekly drinking, binge drinking and other alcohol related problems among Reserve, National Guard and young military personnel in the USA.

ABSTRACTED FROM


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Table 1 New onset alcohol outcomes among military personnel

<table>
<thead>
<tr>
<th></th>
<th>Active duty personnel</th>
<th>Reserve and National Guard personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-deployed (%)</td>
<td>Deployed with combat exposure (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-deployed (%)</td>
</tr>
<tr>
<td>Heavy weekly drinking</td>
<td>4.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>19.3</td>
<td>26.6</td>
</tr>
<tr>
<td>Alcohol related problems</td>
<td>3.6</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Table 2 and a reference list are published online only at http://ebmh.bmj.com/content/vol12/issue2

Alcohol abuse is currently a major concern in the UK. This has been reflected in a tide of tabloid headlines such as “Boozy Britain”. Given their sociodemographics, pre-service background and access to subsidised alcohol, it is perhaps unsurprising that members of the UK Armed Forces are also the subject of similarly unflattering media reports. However, despite the widespread use of alcohol in the military, few large scale systematic studies have been conducted.

Jacobson and colleagues have conducted a longitudinal analysis of data relating to alcohol use and related problems based on a large US military study. The analyses presented are based on data collected at two time points, and cover periods both before and after combat deployment to Iraq and Afghanistan. Of the 48,481 participants, 11% were deployed with combat exposures, 12% were deployed without combat exposures and 77% were not deployed. Alcohol consumption and related problems were associated with being young. But perhaps of greater interest was the link between combat deployment and new onset binge drinking in regulars and new onset heavy drinking, binge drinking and alcohol related problems in reservists. It is important to point out that, in general, both US and UK military deployments are “dry”, so what is being found is that after a period of abstinence those who have been in combat reinstate their drinking at increased levels than before they were deployed. The additional vulnerability of reservists to post-deployment alcohol use replicates the finding in UK reserves as part of a general pattern of increased mental health and behavioural problems after deployment.

Direct comparisons, however, with UK data are difficult because although the sampling strategies used were similar, the definitions of binge and heavy drinking differ, as does the legal age for drinking in the two nations.

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Competing interests: SW is Honorary Civilian Consultant Advisor to the British Army.