Exposure to combat and traumatic events increases risk of violent offending among military personnel

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QUESTION

Question: Do deployment, combat history or postdeployment mental health problems impact on violent offending among military personnel?

People: Participants were randomly sampled in two phases. Phase 1: 17 689 personnel either trained and deployed in Iraq or trained but not deployed. Phase 2: 6628 new recruits who may be deployed in Iraq were added to the sample, as well as 1789 personnel deployed in Afghanistan. Special Forces personnel were excluded.

Setting: UK Armed Forces; phase 1: recruitment, June 2004–March 2005 and phase 2: November 2007–September 2009.

Risk factors: Sociodemographics, behaviour and experiences before joining the military (obtained from self-report questionnaires); deployment status (served in Iraq or Afghanistan since 2003); combat experience; exposure to traumatic events (adapted Combat Experience Scale); and mental health conditions. Mental health in the past month was assessed using set cut-off scores on the General Health Questionnaire-12 (GHQ-12), Post-traumatic Stress Disorder (PTSD) Checklist (PLC-C) and the WHO Alcohol Use Disorders Identification Test. Aggressive score was assessed using a validated measure at phase 2.

Outcomes: Offences, including cautions, reprimands, warnings and convictions. Offences were identified through linkage to the Ministry of Justice Police National Computer Database (PNC), and further classified according to legal descriptions.

METHODS

Design: Prospective cohort study.

Follow-up period: Participants were followed until death, first violent offence, or end of follow-up (July 2011).

MAIN RESULTS

The study included 13 856 personnel (median age 37 years, 89.7% men) who completed questionnaires at either phase 1 or 2, 59% of whom were still in service at the end of follow-up. A total 8887 offences were committed by 15.7% of participants ($n=2197$; 97% men). The majority of these were violent offenders ($n=1398$; 10.1% of the whole sample), with almost a third of violent offenders ($n=423$; 3.1% of the whole sample) committing serious interpersonal violence (at least actual bodily harm). Drug or alcohol-related offences were committed by 6.4% of participants ($n=891$). Prevalence of violent offence fell with age (20.6% at age ≤ 30 vs 4.7% at age > 45). Preservice violent offending was a strong predictor of future violent offending (hazard ratio 3.85, 95% CI 3.07 to 4.82, $p < 0.0001$). Deployment did not increase the risk of violent offending compared with non-deployment. Combat roles were more associated with violent offences than non-combat roles (see table) as was increasing exposure to traumatic events. PTSD, alcohol misuse and high aggression scores were all associated with increased risk of violent offences (see webextra table).

CONCLUSIONS

Violent offending is the most common type of offence among military personnel, and is more common in those with premilitary history of violent offence, those serving in a combat role and those exposed to traumatic events. Alcohol misuse, aggression and PTSD symptoms are also associated and may be targets for evidence-based interventions.

Notes: Women were not included in the analysis beyond phase 1 as they are not deployed in combat roles.

ABSTRACTED FROM

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This study by MacManus and colleagues examining the relationship between combat deployment and subsequent aggressive behaviour makes an excellent contribution to the literature on violence.

The study design has many positive features of which the following are the most significant. First, it controls for levels of predeployment and pre-existing violence. Second, the research project permits an examination of deployment effects separately from combat role and trauma exposure. Third, it provides reliable data on aggression rates using police national computer (PNC) records rather than relying exclusively on self-report. While the study's findings cohere well with existing research, the methodological improvements noted above make the results more robust.

The clinical implications of the present study are noteworthy. The authors' conclusion that increased

rates of aggression after military deployment is related to combat exposure and the presence of mental health problems is therapeutically important. Of particular interest is the discovery that alcohol abuse and post-traumatic stress disorder (PTSD) hyperarousal are predictive of postdeployment violence. Furthermore, the fact that self-reported aggression is correlated with official records is encouraging, as clinicians often only have access to this type of data.

Despite the strengths above, there are some research problems pinpointed by this paper that merit further exploration. While the study demonstrates important links between symptoms and contexts, its design does not allow us to make inferences about the underlying psychological mechanisms. Soldiers ingest substances for all sorts of reasons, not necessarily because of the trauma they might have experienced. The causal directions between alcohol abuse,

PTSD, other mental health problems and combat-related norms, could be complex and variable. For example, the culture of combat soldiers might encourage excessive drinking or the taking of unnecessary risks that result in increased risk of trauma. Another possibility is that the comparative lack of structure after leaving the military could act as a facilitator of violence in individuals who are struggling with mental health and alcohol problems; perhaps related to combat and trauma.

This study lays down a strong conceptual and empirical foundation for future investigation of these complex issues.

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Competing interests None.