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Anger and PTSD in Military Veterans: Review of Current Understanding and Treatment Interventions

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ABSTRACT

Veterans who have served in military armed forces are often more likely to report having difficulties with anger and aggression. Despite this higher prevalence, our understanding of these phenomena in veterans is still emerging. The aim of this review is to explore research evidence into the prevalence of anger and aggression in veterans and to answer questions relating to associations between anger, aggression and other factors such as demographics and health conditions. Finally, the review summarises our latest understanding of the availability and effectiveness of treatment interventions.

Keywords: Anger, Military, Veterans, Mental health, Treatment

INTRODUCTION

Anger and aggression are often reported to be areas of difficulty in military veteran populations [1]. Data suggests that individuals who have difficulties with anger and aggression may be more likely to have difficulties in social relationships, employment or day to day functioning [2].

Furthermore, anger and aggression can often present alongside comorbid health conditions, which may compound the difficulties they pose and significantly affect an individual's well-being [3]. It is important to try to understand why anger and aggression can affect military veterans and what other factors might increase the chances of an individual being affected and in turn what impact it can have.

The aim of this review is to provide an overview of research into anger and aggression in military veterans. Within the review, anger is assumed to be primarily an emotional response and aggression a behavioral manifestation of this emotion. The review will focus on several key questions, each of which adds to our understanding of the risks of developing problems with anger and aggression. The questions relate to the prevalence of anger and aggression in military populations; exploring links between anger, aggression, demographic variables and co-morbid mental health conditions; and whether anger and aggression are linked to problematic behaviors such as offending and risk-taking. Finally, the review will summarize the latest research on treating anger and aggression in veterans.

HOW PREVALENT ARE PROBLEMS WITH ANGER AND AGGRESSION IN MILITARY POPULATIONS?

High rates of anger have been reported both in serving military personnel [1] and veterans who are seeking help for their mental health [4-6] findings which have been found in several countries [1,7,8].

A recent study of UK veterans demonstrated that 74% of those who were seeking mental health treatment reported experiencing difficulties with anger. Furthermore, 28% reported frequent episodes of aggressive behavior [2].

Some authors have proposed hypotheses as to why veterans

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might be more prone to developing problems with anger and aggression. Morland et al. [9] suggested that because combat involves aggression, anger difficulties are more likely to develop in military veterans. Additionally, environmental and cultural factors in military settings might lead to aggressive traits being valued more than those of emotional sensitivity. In turn, anger as a primary emotional response can be highly adaptive in preventing vulnerable emotions such as guilt, sadness and remorse from weighing on individuals.

ARE CERTAIN DEMOGRAPHIC FACTORS LINKED TO ANGER AND AGGRESSION IN VETERANS?

Research into UK veterans found that being younger, male and unemployed increased the likelihood of reporting difficulties with anger and aggression [2]. It may be that those who are not in employment suffer additional functional impairments as a result of anger and aggression which creates a barrier to seeking and maintaining employment. Furthermore, veterans were more likely to report problems with aggressive behavior if they did not feel supported by their family [2]. This suggests that close family support is a protective factor, preventing individuals from acting out on their anger. However, causality is difficult to establish, as being aggressive may have resulted in veterans being alienated from their families, rather than resulting from a lack of support.

In most research samples of veterans, the majority are male, which reflects the traditionally male-oriented nature of armed forces, although these trends are likely to change as more women take on military roles. Nevertheless, there may be some ideas from male psychology which also help to explain the prevalence of anger in veteran populations. For example, some research has posited that males with major depression are less likely to be given a diagnosis because they are more likely to display externalizing behaviors, e.g. aggression in response to distress, as opposed to more typical depressive symptoms, in a form of masculine variation of depression [10-12].

ARE ANGER AND AGGRESSION-LINKED WITH HEALTH CONDITIONS IN VETERANS?

PTSD

There is evidence of high rates of co-morbidity between anger and a range of mental health problems, in particular PTSD [3]. Longitudinal research has suggested that PTSD can predict the onset of anger difficulties, but that anger does not predict PTSD [13]. Feeling and expressing anger may serve as coping strategies for individuals who are overwhelmed by other trauma-based emotions such as guilt, shame, fear and hopelessness. As discussed above, angry reactions might be seen as more socially acceptable or might be more readily accessible to those who have served in the military, but in time this coping strategy becomes maladaptive.

Social processing theory offers an explanation as to why an individual who has experienced trauma might be more likely to respond with anger, as opposed to fear or sadness, for example. Taft et al. [14] reported on findings from studies looking at intimate partner violence (IPV) in individuals with PTSD. One study suggested that those with PTSD were more sensitive to shame-based content and to misinterpret neutral behavior in others as rejecting. These cognitive biases were related to higher rates of aggression and IPV [15]. Similarly, research of a small veteran sample showed that cognitive biases like hostile attributions mediated the relationship between PTSD and anger [16]. Social processing theory offers one way of understanding the link between PTSD and anger, which has implications for treatment, such as targeting cognitive biases.

Symptom network analysis has been used to investigate the nature of relationships between different primary and associate symptoms of PTSD [17], including anger. Findings suggested that anger was strongly associated with feelings of detachment. Detachment could also be described as emotional numbing, or avoidance of emotions and experiences. It is possible that those who are detached from PTSD-related emotions, e.g. fear, shame, sadness, are still able to express anger. Some authors have suggested that military personnel might express anger as a secondary emotion as it feels more empowering than the emotions that are underlying it [18].

Obesity

As well as associations between anger and PTSD, studies of UK veterans have suggested that anger is also related to obesity [19]. Obesity was found to be far more prevalent among veterans seeking support for mental health difficulties and those who reported concurrent mental health difficulties, including anger, were more likely to be classified as obese according to their Body Mass Index (BMI). Other research has shown a relationship between other mental health difficulties and obesity [20] and it is possible that the relationship between anger and obesity is explained by this wider association. There may be several explanations for this link, including illness-related factors (e.g. lack of motivation), lifestyle factors (e.g. diet) or medication side-effects [19]. Again, causality is difficult to establish from this research.

Brain injury

Research has also shown that veterans who report having a traumatic brain injury (TBI) were more likely to describe significant difficulties with anger [21]. Aggression is one of the most common consequences of traumatic brain injury, with prevalence previously reported as high as 34% [22]. Studies of individuals with TBI have shown that verbal aggression is particularly high, but that physical aggression

is less common [23,24]. This relationship might be explained by reduced functioning in areas of the brain involved in impulse control or reasoning. However, aggression after a TBI has also been linked with reductions in psychosocial functioning (including functional impairment and reduced engagement in therapy), activities of daily living, as well as depression, which might partly explain the association with anger and aggression too.

These studies suggest that anger in veterans rarely presents in isolation and instead presents alongside numerous other factors. The challenge for those seeking to help individuals with anger is teasing apart the extent to which anger is the primary target problem, as opposed to an additional secondary symptom of something else, e.g. PTSD.

DO ANGER AND AGGRESSION LEAD VETERANS TO ENGAGE IN PROBLEMATIC BEHAVIORS?

Research has suggested that anger and aggression have been linked to problematic behaviors in veterans. For example, network analysis has found anger to be closely linked to reckless and self-destructive behavior [17]. One such self-destructive behavior could be alcohol misuse. Recent findings have suggested that treatment-seeking veterans who report anger difficulties are also more likely to report alcohol misuse, alcohol dependency and alcohol-related harm [25]. Alcohol misuse is also linked to violent offending in military personnel post-deployment [26]. UK Government statistics show that veterans form the largest single occupational group within the prison and probation services and that they are more likely to have committed a violent or sexual offence than offenders who have not served in the military. Veteran status has been associated with increased levels of interpersonal violence, motoring offences, anxiety disorders and hazardous drinking patterns [27].

Veterans have also been found to have higher rates of risk-taking behaviors, in particular fighting, heavy drinking, smoking and risky driving. Fighting was found to be six times higher in this sample of veterans compared to previous findings of military personnel [26]. Given the high proportion of PTSD within this population group, this high fighting prevalence may be due to neurobiological changes in the brain following trauma and difficulties with emotion regulation [26].

TREATMENT INTERVENTIONS FOR ANGER AND AGGRESSION IN VETERANS

Recent research has systematically reviewed 13 meta-analyses of anger treatments [28]. There was good evidence supporting the effectiveness of anger and aggression interventions, such as CBT and other treatments which have been less widely studied, such as family therapy, psychodynamic therapy and relaxation. The authors note that psycho educational anger classes have very little evidence, despite being commonly used as interventions. They added that CBT-based interventions are often not consistent in their content, which makes it hard to know what components, i.e., cognitive, behavioral, etc. are effective for which populations. Whilst some have questioned whether anger and aggression are necessarily linked, evidence does suggest that the treatment of anger can help to reduce aggression, suggesting that they are related [29,30].

Dialectical Behavior Therapy (DBT) is an adapted form of CBT which has been used widely in the treatment of Borderline Personality Disorder (BPD) and self-harm or suicidal behaviors [31], with a primary focus on emotional disturbance. DBT has been trialed as an anger intervention and one review compiled evidence from 21 studies [32]. DBT typically comprises four core elements: mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness. Results of the review suggested DBT-based interventions for anger show promising reductions in anger and aggression. The review also showed that participants who were experiencing anger alongside other mental health difficulties showed reductions in anger and other psychiatric symptoms, e.g. BPD [33-35]. The authors suggested that this could mean that a DBT approach could be useful for individuals experiencing anger in the context of other psychological difficulties and that reducing anger might accelerate treatment effectiveness for co-morbid problems.

Residential anger management programmes offer a high-intensity alternative to outpatient treatments. In the UK, a two-week intervention has been trialed with veterans, combining elements of CBT and DBT in group and 1:1 environments. Findings have demonstrated reductions in anger in those concurrently experiencing PTSD symptoms [36]. This may have benefits for those who go on to access trauma-focused interventions, as the presence of co-morbid psychological problems can reduce the effectiveness of PTSD treatments [37].

Pharmacological interventions have also been researched in the general population but with few using veteran samples. For example, a small-scale study suggested that a low dose of risperidone was associated with reductions in aggression, irritability and some PTSD symptoms [9,38]. Evidence from general population samples suggests other pharmacological interventions can reduce anger and aggression, such as selective serotonin re-uptake inhibitors (SSRIs), e.g. fluoxetine [39]. However, some authors have discussed how treatment interventions, both pharmacological and psychological, can be have less efficacy in veteran samples compared to the general population [40].

SUMMARY

There is increasing evidence for the prevalence of anger and aggression-related difficulties in military veterans, as well as different relating factors which increase the chance of these difficulties presenting. Anger and aggression are strongly linked to the presence of other co-morbid health difficulties, which poses a challenge in understanding an individual's

difficulties and where to intervene. However, it also presents an opportunity for applying different interventions, as reductions in anger, for example, can lead to improvements in other areas or make it easier to access further treatments. Anger and aggression in veterans is linked to several problematic behaviors which may compound an individual's mental health. Nevertheless, our understanding of the effectiveness of different treatments is improving. Treatments using different CBT and DBT models have been found to be effective, but future interventions might look to more integrative approaches as a way of advancing treatments. Either way, more robust, longitudinal and controlled trials would be of benefit to the field.

REFERENCES

1. Rona RJ, Jones M, Hull L, MacManus D, Fear NT, et al. (2015) Anger in the UK Armed Forces: Strong association with mental health, childhood antisocial behavior and combat role. J Nerv Ment Dis 203: 15-22.
2. Turgoose D, Murphy D (2018) Anger and aggression in UK treatment-seeking veterans with PTSD. Healthcare 6: E86.
3. Frueh BC, Henning KR, Pellegrin KL, Chobot K (1997) Relationship between scores on anger measures and PTSD symptomatology, employment and compensation-seeking status in combat veterans. J Clin Psychol 53: 871-878.
4. Kelsall HL, Sim MR, Forbes AB, Glass DC, McKenzie DP, et al (2004) Symptoms and medical conditions in Australian veterans of the 1991 Gulf War: Relation to immunisations and other Gulf War exposures. Occup Environ Med 61: 1006-1013.
5. Richardson JD, Pekevski J, Elhai JD (2009) Post-traumatic stress disorder and health problems among medically ill Canadian peacekeeping veterans. Aust N Z J Psychiatry 43: 366-372.
6. Rona RJ, Jones M, Fear NT, Hull L, Murphy D, et al (2012) Mild traumatic brain injury in UK military personnel returning from Afghanistan and Iraq: Cohort and cross-sectional analyses. J Head Trauma Rehabil 27: 33-44.
7. Forbes D, Parslow R, Creamer M, Allen N, McHugh T, et al. (2008) Mechanisms of anger and treatment outcome in combat veterans with post-traumatic stress disorder. J Trauma Stress 21: 142-149.
8. Shea MT, Lambert J, Reddy MK (2013) A randomized pilot study of anger treatment for Iraq and Afghanistan veterans. Behav Res Ther 51: 607-613.
9. Morland LA, Love AR, Mackintosh MA, Greene CJ, Rosen CS (2012) Treating anger and aggression in military populations: Research updates and clinical implications. Clin Psychol Sci Pract 19: 305-322.
10. Cochran SV, Rabinowitz FE (2003) Gender-sensitive recommendations for assessment and treatment of depression in men. Prof Psychol Res Pract 34: 132-140.
11. Kilmartin C (2005) Depression in men: Communication, diagnosis and therapy. J Mens Health Gender 2: 95-99.
12. Genuchi M (2015) Anger and hostility as primary externalizing features of depression in college men. Int J Mens Health 14: 113-128.
13. Orth U, Cahill SP, Foa EB, Maercker A (2008) Anger and posttraumatic stress disorder symptoms in crime victims: A longitudinal analysis. J Consult Clin Psychol 76: 208-218.
14. Taft CT, Creech SK, Murphy CM (2017) Anger and aggression in PTSD. Curr Opin Psychol 14: 67-71.
15. Sippel LM, Marshall AD (2011) Posttraumatic stress disorder symptoms, intimate partner violence perpetration and the mediating role of shame processing bias. J Anxiety Disord 25: 903-910.
16. Taft CT, Weatherill RP, Scott JP, Thomas SA, Kang HK, et al. (2015) Social information processing in anger expression and partner violence in returning US Veterans. J Traumatic Stress 28: 314-321.
17. Ross J, Murphy D, Armour C (2018) A network analysis of DSM-5 posttraumatic stress disorder and functional impairment in UK treatment-seeking veterans. J Anxiety Disord 57: 7-15.
18. Reilly PM, Shopshire MS (2002) Anger Management for Substance Abuse and Mental Health Clients: Cognitive Behavioral Therapy Manual. US Department of Health & Human Services.
19. Williamson V, Rossetto A, Murphy D (2019) Relationship between obesity and health problems in help-seeking military veterans. J R Army Med Corps pii: jramc-2019-001155.
20. Scott KM, McGee MA, Wells JE, Browne MAO (2008) Obesity and mental disorders in the adult general population. J Psychosom Res 64: 97-105.
21. Murphy D, Palmer E, Wessely S, Oddy M, Ramos S, et al. (2015) Prevalence and associations between traumatic brain injury and mental health difficulties within UK veterans accessing support for mental health difficulties. Psychol Res 11: 613-623.
22. Tateno A, Jorge RE, Robinson RG (2003) Clinical correlates of aggressive behavior after traumatic brain injury. J Neuropsychiatry Clin Neurosci 15: 155-160.
23. Rao V, Rosenberg P, Bertrand M, Salehinia S, Spiro J, et al. (2009) Aggression after traumatic brain injury:

Prevalence and correlates. J Neuropsychiatry Clin Neurosci 21: 420-429.

24. Dyer KF, Dorahy MJ, Hamilton G, Corry M, Shannon M, et al. (2009) Anger, aggression and self-harm in PTSD and complex PTSD. J Clin Psychol 65: 1099-1114.
25. Murphy D, Turgoose D (2019) Exploring patterns of alcohol misuse in treatment-seeking UK veterans: A cross-sectional study. Addict Behav 92: 14-19.
26. MacManus D, Dean K, Al Bakir M, Iversen AC, Hull L, et al. (2012) Violent behavior in UK military personnel returning home after deployment. Psychol Med 42: 1663-1673.
27. Short R, Dickson H, Greenberg N, MacManus D (2018) Offending behavior, health and wellbeing of military veterans in the criminal justice system. PLoS One 13: e0207282.
28. Lee AH, DiGiuseppe R (2018) Anger and aggression treatments: A review of meta-analyses. Curr Opin Psychol 19: 65-74.
29. Chereji SV, Pintea S, David D (2012) The relationship of anger and cognitive distortions with violence in violent offenders' population: A meta-analytic review. Eur J Psychol Appl Legal Context 4: 59-77.
30. Novaco RW, Taylor JL (2015) Reduction of assaultive behavior following anger treatment of forensic hospital patients with intellectual disabilities. Behav Res Ther 65: 52-59.
31. Linehan MM (1993) Cognitive-behavioral treatment of borderline personality disorder. New York: NY Guilford Press.
32. Frazier SN, Vela J (2014) Dialectical behavior therapy for the treatment of anger and aggressive behavior: A review. Aggression Violent Behav 19: 156-163.
33. Koons CR, Robins CJ, Tweed JL, Lynch TR, Gonzalez AM, et al (2001) Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. Behav Ther 32: 371-390.
34. McMain SF, Links PS, Gnam WH, Guimond T, Cardish RJ, et al. (2009) A randomized trial of dialectical behavior therapy versus general psychiatric management for borderline personality disorder. Am J Psychiatry 166: 1365-1374.
35. Gutteling BM, Montagne B, Nijs M, van den Bosch LM (2012) Dialectical behavior therapy: Is outpatient group psychotherapy an effective alternative to individual psychotherapy? Preliminary conclusions. Compr Psychiatry 53: 1161-1168.
36. Murphy DM, Parry B, Busuttil W (2017) Exploring the efficacy of an anger management programme for veterans with post-traumatic stress disorder. J Psychiatry Cogn Behav 117.
37. Murphy D, Spencer-Harper L, Carson C, Palmer E, Hill K, et al. (2016) Long-term responses to treatment in UK veterans with military-related PTSD: An observational study. BMJ Open 6: e011667.
38. Monnelly EP, Ciraulo DA, Knapp C, Keane T (2003) Low-dose risperidone as adjunctive therapy for irritable aggression in posttraumatic stress disorder. J Clin Psychopharmacol 23: 193-196.
39. Coccaro EF, Lee RJ, Kavoussi RJ (2009) A double-blind, randomized, placebo-controlled trial of fluoxetine in patients with intermittent explosive disorder. J Clin Psychiatry 70: 653-662.
40. Creamer M, Forbes D (2004) Treatment of posttraumatic stress disorder in military and veteran populations. Psychotherapy Theor Res Pract Training 41: 388-398.