Comment

Moral injury: the effect on mental health and implications for treatment

Moral injury is understood to be the strong cognitive and emotional response that can occur following events that violate a person's moral or ethical code.¹Potentially morally injurious events include a person's own or other people's acts of omission or commission, or betrayal by a trusted person in a high-stakes situation. For example, health-care staff working during the COVID-19 pandemic might experience moral injury because they perceive that they received inadequate protective equipment, or when their workload is such that they deliver care of a standard that falls well below what they would usually consider to be good enough.

Unlike post-traumatic stress disorder, which can occur following threat-based trauma, potentially morally injurious events do not necessarily involve a threat to life. Rather, morally injurious events threaten one's deeply held beliefs and trust. Moral injury is not considered a mental illness. However, an individual's experiences of potentially morally injurious events can cause profound feelings of shame and quilt, and alterations in cognitions and beliefs (eq, "I am a failure", "colleagues don't care about me"), as well as maladaptive coping responses (eq, substance misuse, social withdrawal, or self-destructive acts). It is these challenged beliefs and altered appraisals that are thought to lead to the development of mental health problems, with a 2018 meta-analysis finding that exposure to potentially morally injurious events was significantly associated with post-traumatic stress disorder, depression, and suicidality.²

Although exposure to potentially morally injurious events, and the moral injuries that followed, were initially examined in military personnel in combat settings,¹ moral injury is not limited by occupation. Studies increasingly show many professionals are exposed to potentially morally injurious events and the risk of moral injury, including journalists, police, and veterinarians, as well as military personnel.² In the context of the COVID-19 pandemic, moral injury has been found to be one of the greatest challenges reported by UK National Health Service frontline health-care staff and is significantly associated with post-traumatic stress disorder and depression.³⁴ Moral injury was also reported to be a key cause of distress for journalists during their coverage of the 2015 migrant crisis.⁵ Nonetheless, moral injury remains a difficult concept to measure objectively because existing tools often have methodological problems or are not validated for use in non-military populations.

Beyond the reported associations between potentially morally injurious events and mental health outcomes, studies have begun to examine what moral injury can mean for the person affected and how this type of experience can affect their daily functioning. Studies, largely from the USA, highlight how people with moral injury can undergo an existential crisis as a result of their experience.⁶ Other studies show how moral injury can adversely affect the person's familial and occupational functioning, with many affected individuals reporting familial breakdown and unemployment due to their distress related to potentially morally injurious events and maladaptive coping responses.⁷

Taken together, the international literature indicates that moral injury might be an important public health concern. Yet, no validated treatment for moral injury currently exists. Treating patients whose mental health problems are caused by moral injuries can be challenging for clinicians. Firstly, exposure-based approaches could be unhelpful or even harmful in cases of moral injury if inadequate attention is paid to emotional processing of feelings of shame and guilt. Secondly, many commonly used evidence-based treatments for trauma-related mental health problems (eq, trauma-focused cognitive behavioural therapy) often involve cognitive restructuring of a patient's erroneous, pathological, or distorted appraisals and their replacement with new and more adaptive appraisals of the self or the event. Such methods might not be effective or appropriate when treating patients whose shame and guilt arise from commission of transgressive acts of perpetration, rather than from erroneous appraisals.8 For example, with a prison officer who seriously injured a detainee with undue force, it might be futile at best, or increase the likelihood of future perpetration at worst, for a clinician to challenge their accurate appraisals of wrongdoing.



Published Online March 17, 2021 https://doi.org/10.1016/ S2215-0366(21)00113-9



Approaches that focus on self-forgiveness, acceptance, self-compassion, and (if possible) making amends, might hold more promise. In cases in which the effects of moral injury extend beyond psychological to spiritual harms, spiritual care providers could have a role alongside mental health clinicians.9 It is essential that clinicians who assess people exposed to potentially morally injurious events ask about moral injuries sensitively because otherwise patients might avoid talking about their experience or their altered beliefs for which they fear others might judge them.7 In this regard, there is promising emerging evidence for some treatment approaches, such as adaptive disclosure and acceptance and commitment therapy, but these treatments have mainly been trialled in morally injured US military veterans.⁸ As moral injury becomes increasingly recognised in other spheres, more evidence is needed to understand the extent of the problem across populations exposed to potentially morally injurious events and whether such treatment approaches are appropriate and effective for civilian, non-US populations. More consistent reporting of adverse events, treatment dropout, and long-term remission rates is needed for clinicians to be able to offer such treatments to patients with confidence.

VW, DM, and NG had financial support from a Forces in Mind Trust grant (FiMT17/0920E) for the submitted work. NG was funded by the National Institute for Health Research Health Protection Research Unit in Emergency Preparedness and Response, a partnership between Public Health England, King's College London, and the University of East Anglia. The views expressed are those of the authors and not necessarily those of the NIHR, Public Health England, or the Department of Health and Social Care. The funders did not have a role in the drafting of the manuscript or the decision to submit for publication. The other authors declare no competing interests.

*Victoria Williamson, Dominic Murphy, Andrea Phelps, David Forbes, Neil Greenberg victoria.williamson@kcl.ac.uk

King's Centre for Military Health Research, Institute of Psychology, Psychiatry and Neuroscience, King's College London, London SE5 9RJ, UK (VW, DM, NG); Department of Experimental Psychology, University of Oxford, Oxford, UK (VW); Combat Stress Research Department, Combat Stress, Surrey, UK (DM); Phoenix Australia Centre for Posttraumatic Mental Health, Department of Psychiatry, University of Melbourne, Carlton, VIC, Australia (AP, DF)

- Litz BT, Stein N, Delaney E, et al. Moral injury and moral repair in war veterans: a preliminary model and intervention strategy. *Clin Psychol Rev* 2009; 29: 695–706.
- Williamson V, Stevelink SAM, Greenberg N. Occupational moral injury and mental health: systematic review and meta-analysis. Br J Psychiatry 2018; 212: 339–46.
- 3 Greenberg N, Tracy D. What healthcare leaders need to do to protect the psychological well-being of frontline staff in the COVID-19 pandemic. BMJ Leader 2020; 4: 101–02.
- 4 Lamb D, Gnanapragasam S, Greenberg N, et al. The psychosocial impact of the COVID-19 pandemic on 4,378 UK healthcare workers and ancillary staff: initial baseline data from a cohort study collected during the first wave of the pandemic. medRxiv 2021; published online Jan 22. https://doi. org/10.1101/2021.01.21.20240887 (preprint).
- 5 Feinstein A, Pavisian B, Storm H. Journalists covering the refugee and migration crisis are affected by moral injury not PTSD. JRSM Open 2018; 9: 1–7.
- 6 Ames D, Erickson Z, Nagy A, et al. Moral injury, religiosity, and suicide risk in U.S. veterans and active duty military with PTSD symptoms. *Mil Med* 2019; **184**: 271.
- 7 Williamson V, Murphy D, Stevelink SAM, Allen S, Jones E, Greenberg N. The impact of trauma exposure and moral injury on UK military veterans: a qualitative study. Eur J Psychotraumatol 2020; 11: 1704554.
- 8 Steinmetz S, Gray M. Treatment for distress associated with accurate appraisals of self-blame for moral transgressions. *Curr Psychiatry Rev* 2015; 11: 207–19.
- 9 Carey LB, Hodgson TJ. Chaplaincy, spiritual care and moral injury: considerations regarding screening and treatment. *Front Psychiatry* 2018; 9: 619.