



Moral Injury in People Living in Armed Conflict and Natural Disaster Settings: A Narrative Review

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Abstract

This review explores the moral injury in people living in regions affected by armed conflict and outbreaks. It is based on clinical presentation and measurements of moral injury, its prevalence, its theoretical perspective and implications on psychiatric practices. Poor assessment of moral injury, which is sometimes associated with post traumatic disorder, increases the incidence of substance use disorder, major depressive disorders and suicide in the aftermath of armed conflict and outbreaks. Failure to recognize moral injury impairs its management. This article emphasizes the need for routine screening for moral injury in individuals living in armed conflict and outbreak settings.

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Keywords: Moral injury; Armed conflict; Outbreaks; Potentially morally injurious events.

Abbreviations: DSM: Diagnostic And Statistical Manual Of Mental Disorders; ICD: World Health Organization International Classification System For Diseases; PTSD: Post Traumatic Stress Disorder.

Introduction

Moral injury describes the psychological, ethical, cultural, and spiritual impact of moral violation [1,2]. Several models define it as the inability to regulate moral pain [3] or to act in ethical manner [4]. Some traumatic events such as armed conflict and outbreaks transgress moral beliefs regarding failure to fulfill occupational and social duties [5].

Victims of moral injury report guilt and poor self-forgiveness [6], depressive mood [7], and poor engagement in social life [8]. Although moral injury is closely related to post traumatic stress disorder (PTSD), it is not included in the fifth edition of Diagnostic and Statistical Manual of Mental Disorders [9] or the eleventh version of the World Health Organization International Classification System for Diseases (ICD-11) [10]. Furthermore, PTSD is usually described in terms of fear-based disorder, whereas moral injury is surrounding by shame, guilt or moral transgressions [11].



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Coined from the concept moral distress [12], the concept moral injury was described in the 1990s based upon military narrative histories of veterans who perceived the injustice and disruption of norms during their deployment as a result of malpractice [13]. Since 2009, the concept moral injury encapsulates the moral anguish experienced by military service members after returning home from war [14]. Recent studies have tried to reveal how moral injury develops [15], and its biological, psychological, spiritual, and social consequences [16]. To date, moral injury lacks a clear basis for diagnosis.

Moral injury is associated with several mental health problems such as anxiety, depression, and hostility [17]. Moral injury is also a major cause of negative health outcomes including suicidality [18]. Experiencing a traumatic event, which is potentially morally injurious including armed conflict and outbreaks, is usually interpreted by its high risk of PTSD compared to moral injury in clinical practices [11].

Although moral injury is common among veterans, studies have suggested that perpetrators of sexual abuse, witnesses or victims of atrocities, survivors of outbreak and associates are also at high risk of moral injury [19,2,14]. Poor protection of relatives from murder or kidnapping may lead more to moral distress in family members [14]. Moral injury is significantly associated with behaviors, social and physical changes in affected individuals affected by complex traumatic events (2021). Hitherto, few attention has been linked to moral injury in armed conflict and outbreak settings [19,1,14,]. This narrative review describes the clinical presentation and measurements of moral injury, its prevalence, its theoretical perspective and its implications on psychiatric practices during and in the aftermath of armed conflicts and natural disasters.

Moral injury: Clinical presentation and measurements

Potentially morally injurious events lead to significant distress in victims and perpetrators. They impair social wellbeing, disrupt the social satisfaction [23,5,24], and increase the rate of suicide in veterans [25]. These events also cause important interpersonal difficulties [1], self-condemnation or self-rejection [7], and resentment [26]. Potentially morally injurious events associated with moral injury are predictor of PTSD and several mental disorders [27].

Numerous instruments have been used to diagnose moral injury [10,27,1]. They include the Moral Injury Event Scale [29]; and the 20-item Moral Injury Questionnaire [30] both used among soldiers and veterans; as well as the Moral Injury Symptom Scale centered in health professionals [31]. These scales assess for moral injury among victims or witnesses of potentially morally injurious events [32]. To date, morally injurious sequelae of traumatic event is not captured nor covered by the PTSD diagnostic criteria [33]. The role of moral aspects in the psychopathology during traumatic events highlights the need for addressing potentially emotional, physical, social, and spiritual burdens among survivors and combatants [34].

Prevalence and factors associated with moral injury

The prevalence of moral injury varies across studies [22]. More than 25% of veterans reported moral injury due to ethical situations [35]. For instance, a study among Canadian force combatants deployed in Afghanistan revealed moral injury in 65% of cases [29]. Spouses, relatives and friends of military soldiers deployed to armed conflict areas also showed high rates of trauma-related disorders, with a greater association to moral

injury and depression in nearly 34% of cases [5]. Furthermore, the majority of practitioners working with human being reported moral injury due to failure to fulfill their duties [2]. Another study conducted among refugees demonstrated that appraising moral violations committed by others or themselves leads to significant psychopathology [36].

Victims of potentially morally injurious events seek health-care services from non-mental health providers including priest, traditional healers and friends [37]. Hitherto, there is a paucity of studies focused on moral injury among non-military individuals and those who live in areas not affected by armed conflict or outbreaks. There is a need for the theoretical framework of moral injury for a better understanding of its contribution to burden of mental illness.

Moral injury: Understanding the theoretical perspective and clinical implication on mental health practices in armed conflict and outbreak settings

Moral injury linked PTSD symptoms to demoralization, self-injury, and self-handicapping [1]. Failure to meet the intersection of spirituality, social normal, and ethical considerations leads to inner conflict expressed by guilt, loss of trust and hope, spiritual struggles, and shame [23,11,14]. In most cases, moral injury impairs the identity negotiation process between real-self and the self affected [23]. However, in military services, it is influenced by preparedness or training before deployment to conflict zones.

Moral injury is associated with neural changes, especially in the left precuneus retrosplenial cortex and left inferior frontal gyrus/anterior insular cortex which are linked to guilt and shame. Moreover, changes in left inferior parietal lobule are positively associated with Moral Injury Event Scale subscores of transgressions and negatively correlated to subscores of betrayals [38]. However, few studies have confirmed similar findings between neural changes of moral injury and the Moral Injury Event Scale. Moral injury is also linked to increased neural activation of right posterior insula, involved in viscerosensory processing and hyperarousal; the left postcentral gyrus involved in defensive responding; and the left dorsolateral prefrontal cortex involved in cognitive control of emotions, trait shame and self-related processing and moral cognition [39]. Moreover, the neurological changes differ for those of PTSD, although the modifications can be associated [40].

In fact, potentially morally injury events cause PTSD symptoms when they are associated with cognitive and mood alterations [36], among soldiers, civilian witnesses of armed conflicts [22,41,42], and survivors of pandemics and outbreaks [26,43]. Failure to recognize moral injury may impair its management [26]. The description of PTSD stemming from potentially morally injury events among veterans revealed that moral injury was successfully treated prolonged Exposure and Cognitive Processing Therapy, and the acceptance and commitment therapy [44]. However, multiple presentations of moral injury among affected individuals impair the implementation of specific strategies of treatment [18]. In fact, Held and associates (2018) highlighted challenges faced by clinicians treating veterans with PTSD resulting from moral injury using either prolonged Exposure or Cognitive Processing Therapy. They suggested a need for additional time to manage potentially morally injurious patients before they reported being involved in traumatic experiences associated with moral injury. Furthermore, there is a paucity of health workers trained in both the management and follow-up

of moral injury in regions affected by armed conflict and outbreaks [45]. Specific treatment targeting the recovery of transgressions and betrayals among individuals with moral injury should be moral injury-informed therapy in order to reduce the burden of potentially morally injurious events.

Conclusion

Moral injury affects many individuals in armed conflict and outbreak regions, despite the fact that it is not usually assessed in survivors or witnesses of traumatic events. Current evidence has shown positive health outcomes during its management. This review warrants further studies on the contribution of moral injury into the burden of mental illness in traumatic events as well as the building capacity for the management of moral injury in areas at high risk of potentially morally injurious events.

Highlights

- Many traumatic events which transgress moral beliefs such as failure to fulfil occupational and social duties lead to moral injury.
- Not only soldiers or frontline workers are affected by moral injury in areas affected by armed conflict and outbreaks.
- Failure to recognize moral injury may impair its management which, is in most cases, uncertain in the majority of individuals who do not present features of PTSD

Availability of data and materials

The data used to support this study are available from the corresponding author upon request.

Authors' contribution

Bives Mutume Nzanu Vivalya and David Foreman designed the study. Bives Mutume Nzanu Vivalya searched literature and drafted the manuscript. Abamara Nnaemeka Chukwudum and David Foreman reviewed the manuscript for intellectual and technical content. The authors read, contributed to, and approved the final manuscript.

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