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LAY SUMMARY

Moral injury (MI) can be defined as a diverse set of outcomes associated with actions that transgress one's moral beliefs or values. MI can be distressing for an individual at the interpersonal level (e.g., shifting relationships, feelings of betrayal) and the intrapersonal level (e.g., internalized guilt and shame). Indeed, these transgressions of moral beliefs and values have been associated with a high prevalence of mental illnesses, such as posttraumatic stress disorder (PTSD) and depression. Although various forms of assessment exist to identify MI in the individual, treatments for MI are often interlinked or embedded in evidence-based treatments for PTSD and depression. As such, unique contributions of MI as a target of treatment remain largely unclear. In this article, the authors explore existing treatments that may be used to treat MI as a distinct mental health construct and examine their utility in reducing symptoms of MI in military and Veteran populations.

Key words: beliefs, mental health, MI, military, moral injury, perspectives, treatment, values, Veterans

Veterans and military members have a higher likelihood of exposure to training or operational scenarios that are potentially morally injurious. Whether during deployment (e.g., engaging with child soldiers, witnessing harm to women, children, or both, or following operational orders that transgress personal values and ethics) or during regular military training or duties (e.g., experiencing military sexual assault, participating in a culture of discrimination, or following orders that transgress personal values and ethics), these scenarios may result in moral injury.

The term moral injury (MI) was coined in 2009 to account for the profound and long-standing psychological and spiritual sequelae of exposure to events or situations that involve perpetrating, failing to act, or witnessing behaviours that violate one's moral code and expectations.[1-4] These situations are termed potentially morally injurious experiences (PMIEs) because of the recognition that not every individual will be affected by the same situation or experience.[1-4]

Over the past decade, empirical and clinical discourse has focused on the construct of MI, specifically its etiology, phenomenology, clinical uniqueness, and associated treatment recommendations. MI can be distressing for an individual at the interpersonal level (e.g., shifting relationships, feelings of betrayal) and the intrapersonal level (e.g., internalized guilt and shame), with symptoms falling on a continuum from moral distress to more long-term impairment. Indeed, MI is often conceptualized as a risk pathway to psychological distress and associated with other chronic psychiatric conditions,[5] such as posttraumatic stress disorder (PTSD), major depressive disorder (MDD), and other operational stress injuries (OSIs).

Military members and Veterans regularly seek treatment for conditions such as PTSD, MDD, and other OSIs. Although not a formal diagnosis in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*,[6] many of the conditions for which Veterans and serving members of the Canadian Armed Forces seek treatment arguably have a component of MI in their etiology, symptom presentation, or prognosis. MI is likely to exacerbate or co-occur with other mental health conditions as well.

Although various forms of assessment, including the Moral Injury Events Scale (MIES) and the recently published Moral Injury Outcome Scale (MIOS),[7,8] assess exposure to military PMIEs and the symptoms of MI, there is no consensus on or specific guidelines for the clinical assessment and treatment of MI. From

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an assessment perspective, the presence of MI often requires clinicians to ask specific questions to draw out MI, after spending careful time establishing rapport and cultivating an atmosphere of openness and nonjudgment, which is imperative when traumatic events involve MI. Clinicians also need to recognize that clients are highly motivated to avoid thinking about MI as a result of shame and guilt and may not be ready and willing to share details of their experiences because of the condemnation that is often anticipated from valued others. Further guidelines are necessary to aid clinicians in the accurate assessment of MI.

Currently, numerous treatment guidelines support the use of psychotherapy and pharmacotherapy to treat common OSIs such as PTSD and MDD. However, some research has demonstrated that military-related PTSD traditionally has a poorer response to evidence-based treatments than civilian-related PTSD.[9] Although many reasons were hypothesized to account for the reported poorer response in military samples (e.g., the therapies do not address military culture and warrior ethos, primarily male population, exposure to multiple traumatic events, requiring a longer course of treatment), it is speculated the presence of co-occurring MI may also be a contributing factor. For example, the symptoms of MI may be more challenging to tackle, require a longer course of treatment, or need modifications to existing treatment protocols. It is also likely that a PMIE was not previously thought about or discussed in a dispassionate or balanced manner, which may affect constructions of moral culpability. This lack of insight often solidifies negative thoughts about oneself as being unforgiveable, immoral, and deserving of punishment.

With respect to pharmacotherapy, the focus of medication management might be on targeted symptom improvement using antidepressants to assist with depressive or anxiety symptomatology or atypical antipsychotics to target excessive delusional guilt, all of which may coexist as part of MI. Unlike PTSD and MDD, which have standardized treatment outcome measures such as the PTSD Checklist for DSM-5 or the Patient Health Questionnaire-9, until recently no standardized evaluation tool was available to monitor MI treatment outcomes. Therefore, it was challenging to systematically measure the specific impact pharmacotherapy and psychotherapy may have on specifically addressing MI. The recent publication and validation of the MIOS will provide a useful tool for clinicians and researchers to measure targeted treatments for moral injury.[8]

Outside of pharmacotherapy,[10-13] trauma-focused psychotherapy, such as prolonged exposure therapy (PE) and cognitive processing therapy (CPT), have been shown to be effective, to a degree, in clinical trials of military-related PTSD. Efficacy trials examining the effectiveness of trauma-focused psychotherapy on MI have been scant, and more research is needed to explore the acceptability and effectiveness of these therapeutic approaches when the primary traumatic event is morally injurious in nature.

Although the identified cornerstone emotions of MI, including anger, guilt, and shame, and associated cognitions appear to decrease as a result of PE and CPT, further research is required to elucidate their effectiveness in addressing all MI symptoms and specific guidelines for required modifications of the length and course of these treatments when processing a PMIE. This research will inform whether new treatments, such as adaptive disclosure, should be developed to address MI distinctively or whether PE or CPT may be sufficient to treat MI along with other clinical symptoms.[14] Finally, pastoral narrative disclosure and other related approaches combine the biological, psychological, and spiritual care of moral injury through the work of chaplains.[15] Although more holistic in nature, more research is needed to examine their effectiveness in treating both MI and co-occurring mental health conditions.

Taken together, future research should support clinical consensus and practice guidelines for the assessment and treatment of MI in military and Veteran populations. Contributions to this emerging clinical construct aid in the better understanding of its etiology, symptom presentation, and treatment prognosis of MI. In the authors' clinical experience, there is also a dearth of understanding of MI's cumulative impact on treatment outcome and prognosis for those who are also diagnosed with PTSD and MDD. Further empirical research and consequent treatment recommendations would be beneficial in advancing practice in this area.

The authors urge future research to examine MI as a primary or secondary outcome and encourage the development of rigorous assessment tools that evaluate MI as a continuum, rather than a dichotomous construct, and provide concrete recommendations for the timely and accurate identification of MI. More research is required to elucidate whether MI can be effectively targeted through evidence-based pharmacotherapy and psychotherapy for PTSD and MDD or whether novel treatment modalities are required. From a clinical

standpoint, health care practitioners are encouraged to consider MI as a potential target of treatment and to incorporate MI-sensitive strategies and interventions in current assessment and treatment guidelines to improve the prognosis and overall well-being of military and Veteran populations.

AUTHOR INFORMATION

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The authors have nothing to disclose.

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