OPINION ARTICLE

Moral injury and the four pillars of bioethics [version 1; peer review: 2 approved with reservations]

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Abstract

Health care providers experience moral injury when their internal ethics are violated. The routine and direct exposure to ethical violations makes clinicians particularly vulnerable to harm. The fundamental ethics in health care typically fall into the four broad categories of patient autonomy, beneficence, nonmaleficence, and social justice. Patients have a moral right to determine their own goals of medical care, that is, they have autonomy. When this principle is violated, moral injury occurs. Beneficence is the desire to help people, so when the delivery of proper medical care is obstructed for any reason, moral injury is the result. Nonmaleficence, meaning do no harm, has been a primary principle of medical ethics throughout recorded history. Yet today, even the most advanced and safest medical treatments all are associated with unavoidable, harmful side-effects. When an inevitable side-effect occurs, not only is the patient harmed, the clinician also suffers a moral injury. Social injustice results when patients experience suboptimal treatment due to their race, gender, religion, or other demographic variables. While moral injury occurs routinely in medical care and cannot be entirely eliminated, clinicians can decrease the prevalence of injury by advocating for the ethical treatment of patients, not only at the bedside, but also by addressing the ethics of political influence, governmental mandates, and administrative burdens on the delivery of optimal medical care. Although clinicians can strengthen their resistance to moral injury by deepening their own spiritual foundation, that is not enough. Improvements in the ethics of the healthcare system as a whole are necessary in order to improve medical care and decrease moral injury.

Keywords

moral injury, burnout, bioethics

Open Peer Review

Approval Status ? ?

	1	2
version 1 26 Jul 2019	? view	? view

1. **Lindsay B Carey**, La Trobe University, Melbourne, Australia

2. **Jan Helge Solbakk**, University of Oslo, Oslo, Norway

Any reports and responses or comments on the article can be found at the end of the article.

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Author roles: Heston TF: Conceptualization, Writing – Original Draft Preparation; **Pahang JA**: Writing – Review & Editing

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Introduction

Moral injury occurs when a person experiences an immoral event that disrupts their fundamental moral integrity. Injuries can be self-inflicted by intentionally doing something wrong or come about as collateral damage through observation of a real or perceived action that violates an internal sense of right and wrong. Those suffering from moral injury have a disruption of their sense of morality, with consequences impacting their capacity to behave in a moral manner. The injury reduces their capacity to think of themselves as a moral, good person (Yan, 2016).

The term moral injury was introduced initially to describe the reaction of military veterans to the participation in or observation of profound ethical transgressions occurring during wartime (Shay & Munroe, 1999). The diagnosis of moral injury in veterans relies on the presence of three factors: a betrayal of what is right, which is carried out by someone who holds legitimate authority (e.g. a leader), and occurs in a high stakes situation (Shay, 2014). The diagnosis of moral injury, however, has not been limited to those exposed to the atrocities of war. It has also been evaluated in refugees, health care workers, and adolescents transitioning to adults (Chaplo *et al.*, 2019). In these diverse groups, while moral injury is recognized as a distinct entity from other psychological conditions, such as post-traumatic stress disorder, the diagnosis relies on poorly defined, generalized criteria, which is very similar to that used for combat veterans. While symptom scales have been developed for military personnel, adolescents, and refugees, no specific diagnostic criteria exist for health care workers (Chaplo *et al.*, 2019; Koenig *et al.*, 2018; Nickerson *et al.*, 2018).

The optimal treatment of moral injury, just like the diagnosis of moral injury, remains unclear. Proposals to treat moral injury in medical professionals include participation in support groups, building up personal character, and personal reflection by keeping a diary. The inclusion of standard treatments for post-traumatic stress disorder in veterans suffering from moral injury has also been proposed.

A maxim of medicine is that a correct diagnosis is half the cure. In the case of moral injury as it specifically applies to medical professionals, we propose that a violation of the four pillars of bioethics forms the foundation of the diagnosis. We propose a framework for moral injury in health care based upon the four pillars of bioethics (Beauchamp, 2006). These pillars are patient autonomy, beneficence, nonmaleficence, and social justice. They serve as an effective foundation for evaluating moral behavior in medicine. Our framework clarifies the meaning of moral injury in medicine. When a physician, nurse, or other health care provider participates in, or witnesses a violation of, one or more of these core principles, moral injury occurs. Treatment strategies focused on repairing the breach of these principles of morality in health care may be the best way to heal the injury. Improving the recognition of and reflection upon the moral stressors that clinicians encounter in their practice may prevent moral injury from progressing further. This framework will help more clearly define moral injury in medical professionals, allowing the development of treatment specific to those working in health care.

Patient autonomy

The principle of respect for autonomy holds that each person with capacity has the right to make their own decisions, and providers have a moral obligation to respect this right. In the clinician-patient relationship, patient autonomy can be especially vulnerable. This principle is often at the forefront of ethical concerns in health care (Entwistle *et al.*, 2010); (Stammers, 2015).

Compromising patient autonomy can result in moral injury, regardless of whether or not the perceived event is a true violation. For example, children presenting to the emergency department may openly voice a desire to not get an injection or an intravenous line. Although it is recognized that the decision of the legal caregiver overrides that of a young child, the perception of compromised autonomy can result in moral injury. Although the reason for the injection or intravenous line is medically indicated, the action nevertheless is against the will of the child. Logically, we know children will cry and object to many medical treatments. Still, whenever possible, it is recommended to obtain consent from both the child and the parent. Consent to treatment requires permission from the legal representative of the child, and if possible, assent from the child as well (Tait & Hutchinson, 2018). The accumulation of such experiences that challenge the clinician's duty to respect patient autonomy may eventually lead to moral injury.

Nonmaleficence

The principle of nonmaleficence is captured by the Latin maxim, *primum non nocere:* "above all, do no harm." It has been estimated that medical error is the third leading cause of death in the United States (Makary & Daniel, 2016). While the potential to reduce these errors is debated, common preventable harms include medication adverse events, central line infections, and thromboembolisms (Nabhan *et al.*, 2012). With increasing ability to treat patients comes increasing opportunity to harm patients as systems become more complex. Most clinicians are very aware and regularly reminded of these statistics, however, the seemingly futile efforts to try and reduce the incidence of these harms is troublesome and can contribute to moral injury. Bureaucratic and administrative interference, well intended or not, can hamper efforts by physicians and nurses to decrease harm, leading to moral injury and a sense of powerlessness.

Beneficence

With the many opportunities to harm a patient in mind, we must also remember that patients come to clinicians in search of improvement or restoration of their health, which leads to the principle of beneficence. The commitment to helping others is the driving force amongst health care workers and to accomplish this goal there must be a net benefit over harm (Gillon, 1994). Decisions on diagnostic pathways, treatment plans and societal policies all must balance the benefit versus harms, and these balances also must be made in context of the patient's values.

Beneficence, when compromised, creates numerous conflicts in medicine that can result in moral injury. When the cost of proper medical care exceeds the ability of an individual patient to pay, beneficence can be compromised. Pharmaceutical pricing is a common cause of this moral compromise. For example, many patients with atrial fibrillation will benefit from changing their warfarin prescription to a newer, direct oral anticoagulant such as apixaban. However, the up-front price of the newer medication prohibits them from changing, even though the total financial cost of the newer medication is estimated to be lower due to fewer medical complications (Gupta *et al.*, 2018). Beyond the financial impact, the negative impact upon the patient's health can be devastating. Compromising the principle of beneficence occurs when the patient is unable to take the best medication because of financial limitations. Although the medical complications from the older medication will ultimately cost more money, the hard reality is that patients will take the cheaper medication because they cannot afford the up-front costs of the newer, better medication.

Social justice

The final pillar of bioethics is social justice. Justice demands that limited resources be distributed fairly, and that patients not be discriminated against due to any number of demographic variables such as race, religion, gender identity, sexual orientation, age, or cultural background. Moral injury occurs when these ideals conflict with the hard reality of medical care where discrimination does occur, primarily along socioeconomic lines.

These complex socioeconomic disparities cause moral injury because clinicians know what their patients need and find the economic barriers to needed care to be illogical, unnecessary, and capricious. They know that not getting that nursing home bed placement will result in a bad outcome, often at a much higher cost. They know that not getting a patient with a substance use disorder necessary treatment will ultimately cost more to society, although the health care plan may save money. They have seen first-hand the elderly family member decide they would rather die than leave a large medical bill for their surviving relatives. Witnessing these events on a regular basis doesn't cause burnout, it causes moral injury.

Medical professionals working in medical systems and countries that rely on privately funded insurance may also experience a constant violation of the principle of social justice. For example, one study comparing a population with universal medical insurance found disparities in the care given to racial and ethnic minorities to be greatly decreased or even eliminated (Chaudhary *et al.*, 2018). A similar study found that universal medical insurance ameliorated socioeconomic disparities in mortality (Veugelers & Yip, 2003). Medical professionals working in private medical insurance systems who know about and trust such research studies may experience a persistent low-grade violation of their bioethics. This, over time, may progress to symptomatic moral injury. The primary means of addressing such issues would be meaningful involvement in improving the larger health care system.

Conclusion

Moral injury occurs when there is a disruption in an individual's sense of personal morality and capacity to behave in a just manner. It is a common occurrence in medicine because of ongoing violations of bioethics that have become an intrinsic part of the healthcare system. The prevention of moral injury is accomplished by decreasing violations of the four pillars of bioethics whenever possible. Patients deserve autonomy, and we can give this to them. Although we cannot always help our patients as much as we would like, we can always help them in at least some way. We can be vigilant when taking measures to increase patient safety and decrease harm. With a firm understanding of the basic principles of bioethics, medical professionals can become more adept at identifying and reflecting upon moral violations in the workplace. This recognition helps prevent recurrent moral injury, decreases burnout, and can help to heal previous injuries.

Data availability

No data are associated with this article.

Grant information

The author(s) declared that no grants were involved in supporting this work.

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Open Peer Review

Current Peer Review Status: ? ?

Version 1

Reviewer Report 13 July 2020

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Department of Health and Society, Centre for medical Ethics, University of Oslo, Oslo, Norway

This is a very short and well written paper. But the paper would have benefited from further substantiation by relating the concept of moral injury to the concepts of moral failure, moral residue and moral distress.

Here are some references the authors are advised to consult:

- Lisa Tessman, Moral distress in health care: when is it fitting? Medicine, Health Care and Philosophy (2020) 23:165–177 https://doi.org/10.1007/s11019-020-09942-7.[1]
- Boudreau, Tyler. 2011. The morally injured. The Massachusetts Review 52(3/4): 746–754.[2]
- Campbell, Stephen, Connie Ulrich, and Christine Grady. 2016. A broader understanding of moral distress. The American Journal of Bioethics 16(12): 2–9.[3]
- Tessman, Lisa. 2015. Moral failure: On the impossible demands of morality. New York: Oxford University Press.[4]
- Williams, Bernard. 1973. Ethical consistency. In Problems of the self, ed. B. Williams, 166–186. Cambridge: Cambridge University Press.[5]

In addition, I advice the authors to consult the literature on adverse events in health care that are impossible to predict or prevent and which may cause moral distress, burnout and moral injury. That is, the fact that less than 50% of all adverse events in health care are possible to predict and prevent (of which a significant minority causes permanent disability, 7%, or death, 7%), is a painful reminder of the prevalence of unavoidable normative ignorance in health care and the importance of learning to live through moral failure caused by such events. For this, see e.g:

- Rafter, N., Hickey, A., Condell, S. et al. (2015). Adverse events in health care: learning from mistakes. QJM: An International Journal of Medicine, 108, 4: 273–277, and De Vries, E.N., Ramrattan, M.A., Smorenburg, S.M. et al. (2008). The incidence and nature of in- hospital adverse events: a systematic review. Qual Saf Health Care,17: 216-223.[6]

Finally, the authors are advised to focus more on the problem of moral failure and injury among

health care workers. In the present version of the paper the main focus is on the patient's experience of moral injury.

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Is the topic of the opinion article discussed accurately in the context of the current literature?
Partly

Are all factual statements correct and adequately supported by citations?
Yes

Are arguments sufficiently supported by evidence from the published literature?
Partly

Are the conclusions drawn balanced and justified on the basis of the presented arguments?
Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Bioethics

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 26 July 2019

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Lindsay B Carey

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This is an innovative and valuable consideration/discussion of moral injury (MI) in light of the key bioethical principles - both of which are used to justify the political issue of employee burnout within the clinical context.

Given the current literature however, Shay's definition of MI (considered valuable but now too simplistic) which is used as the basis for this article, is no longer the dominant definition of moral injury since (for example) the work of Litz *et al.* (2009)[1], or Jinkerson (2016)[2], or Carey & Hodgson (2017).[3] It is important to note, that since Shay's definition, there have been at least 17 different definitions of Moral Injury (refer Hodgson & Carey, 2017[3]) and currently the most comprehensive synthesized version is that of Carey & Hodgson, 2018; *Frontiers in Psychiatry*[4] which needs to be noted by the authors of this article, indicating that there are other MI definitions but few utilize a holistic bio-psycho-social-spiritual paradigm to define or consider MI.

Most of the statements within the article are sufficiently supported; however, I think it important to cite Beauchamp and Childress (2013)[5] with regard to biomedical ethics and the bioethical principles (not just Beauchamp).

Further, it can be argued that the real issue of MI within the medical/clinical context (in light of the more complex definitions of MI) should actually be due to a clinician suffering "a trauma related syndrome caused by the physical, psychological, social and spiritual impact of grievous moral transgressions, or violations, of an individual's deeply-held moral beliefs and/or ethical standards due to: (i) an individual perpetrating, failing to prevent, bearing witness to, or learning about inhumane acts which result in the pain, suffering or death of others, and which fundamentally challenges the moral integrity of an individual, organization or community, and/or (ii) the subsequent experience and feelings of utter betrayal of what is right caused by trusted individuals who hold legitimate authority" (Carey & Hodgson, 2018).

It other words it can be argued that as a result of breaches of fundamental bioethical principles that "...grievous moral transgressions, or violations, of an individual's deeply-held moral beliefs and/or ethical standards" will occur, resulting in a moral injury (Carey & Hodgson, 2018, p. 2). Then it should be explained that "A moral injury can eventuate as a result of one or two types of occurrences, namely when (i) an individual perpetrates, fails to prevent, bears witness to, or learns about inhumane acts which result in the pain, suffering or death of others, and which fundamentally challenges the moral integrity of an individual, organization or community, and/or (ii) the subsequent moral injury experience and feelings of utter betrayal of what is right, caused by trusted individuals who hold legitimate authority" (Carey & Hodgson, 2018, p.2).

To shift too far from such a definition/explanation would mean that it is not really a complex 'moral injury' at all - but rather a 'superficial' incident that conflicts with professional bioethics. Put simply, the more advanced / complex definitions of moral injury should be utilised and will actually co-align a lot easier with the bioethical principles.

The conclusions are somewhat justified on the basis of the presented arguments; however, it is somewhat of an assumption to conclude that ....a firm understanding of bioethics ....will prevent recurrent MI! This is doubtful - indeed t'would be like saying that a better understanding of

bioethics will prevent the effects of witnessing a trauma related incident (e.g., a murder). Highly improbable!

There is also no evidence provided to indicate/justify that a better recognition of the connection between bioethics and MI will decrease burnout! Indeed one can speculate that better recognition might actually increase one's stress, and increase the chances of subsequent burnout! (Not decrease burnout!). The most one could argue (in the absence of solid evidence) would be that "a better understanding of the effects of breaching bioethical principles within the work place, and the possible correlation with experiencing a moral injury, may explain feelings of recurrent burnout"... but it certainly would NOT prevent MI nor unlikely to prevent injuries. The conclusion needs to be edited as well as adding a note for empirical research to be undertaken with regard to MI and clinician burnout in the clinical context.

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Is the topic of the opinion article discussed accurately in the context of the current literature?

Partly

Are all factual statements correct and adequately supported by citations?

Partly

Are arguments sufficiently supported by evidence from the published literature?

Partly

Are the conclusions drawn balanced and justified on the basis of the presented arguments?

Partly

Competing Interests: Reviewer is author of several articles relating to moral injury.

Reviewer Expertise: Bioethics, Moral Injury

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 26 Jul 2019

Thomas F Heston, Washington State University, USA

I appreciate the comments from the reviewer and in general agree. In other groups outside of health care providers, moral injury is becoming more precisely defined. However, the definition and implications of moral injury in health care professionals currently remains vague. With this perspective paper, we aim to stimulate investigation into the relationship between a violation of well established bioethical principles and moral injury. We remain convinced that moral injury, both minor and large, regularly affects medical professionals, and that there most likely is a strong relationship to the four pillars of bioethics. Nevertheless, more research and investigation clearly is indicated. Again, the comments from the reviewer are thorough and greatly appreciated.

Competing Interests: No competing interests were disclosed.

Reviewer Response 27 Jul 2019

Lindsay B Carey, La Trobe University, Melbourne, Australia

Dear Article Authors,

I concur with your "aim to stimulate investigation into the relationship between a violation of well established bioethical principles and moral injury" and "that moral injury.... regularly affects medical professionals, and that there most likely is a strong relationship between (breaches of) the four pillars of bioethics" and moral injury - Indeed this seems logical and most viable. However my concern is that, currently your understanding of MI "remains vague" and this is understandable because some researchers and even yourselves, have based their understanding of MI on a basic definition. Except for those who wish MI to remain vague/basic for their own purposes, the research regarding MI, demonstrates that MI is far more complex than originally conceived.

I think it is important to note that on the one hand you opt for a simple definition of MI, yet one of your own article statements aligns with more complex definitions: *"When a physician, nurse, or other health care provider participates in, or witnesses a violation of, one or more of these core principles, moral injury occurs"*. I am simply suggesting: (1) the correlation between violations of bioethical principles and a MI or a potential moral injury event (PMIE), seems logical and would unquestionably affect clinician morale, however any correlation between bioethical principles and MI requires a more complex definition of MI. (2) There is no need for another definition of MI specific to clinicians - this would simply muddy the waters - there are already several comprehensive definitions (Litz et al, Jinkerson and a combination of Shays and others by Carey & Hodgson) as already noted in my earlier review - which are all based on empirical research/case studies. If there is no correlation with these more complex definitions, then perhaps it is not moral injury to which you are referring, but something entirely different.

To be sure however, I support your argument/logic about bioethical principles regularly being breached in the health care context which could result in a moral injury for clinicians, however MI is complex and therefore requires a more comprehensive definition - which in

my view would actually support your investigation into the relationship between a violation of well established bioethical principles and moral injury.

Competing Interests: No competing interests were disclosed.