PERSPECTIVES

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Moral injuries in healthcare workers: What causes them and what to do about them?

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Abstract:

Moral injury (MI) refers to the persisting distress which may occur following exposure to potentially morally injurious events (PMIEs). The COVID-19 pandemic has drawn attention to MI in healthcare workers (HCWs), who have been found to experience more frequent PMIEs in their day-to-day work than those in other occupational groups such as the military[1]. These events may occur on an individual, team, organizational or system level, and have been associated with increased clinician burnout and distress, and poor psychological wellbeing[2]. This paper focuses on HCWs' experiences of MI, including potential causes and ways to reduce them. There are myriad challenges that influence development of MI, such as chronic understaffing and the pressure to treat high numbers of patients with limited resources. There are also multiple impacts of MI: at the individual-level, MI can lead to increased staff absences and understaffing, and prolonged patient contact with limited decision-making power. COVID-19 exacerbated such impacts, with a lack of organizational support during a time of increased patient mortality, and uncertainty and heightened pressure on the clinical frontline associated with scarce resources and understaffing. Potential methods for reduction of MI in HCWs include pre-exposure mitigation, such as fostering work environments which treat PMIEs in the same way as other occupational hazards and post-exposure mitigation, such as facilitating HCWs to process their experiences of PMIEs in peer support groups or with spiritual advisors and, if MI is associated with mental ill-health, talking therapies using trauma-focused and compassion-oriented frameworks.

Keywords: Moral injury, healthcare workers, causes, effects, mitigation, pandemic, prevention, treatment

Introduction

Moral injury (MI) was first proposed as a framework to help soldiers, veterans, and their mental health practitioners conceptualize experiences during war that violated servicemembers' moral codes and were not neatly captured by diagnosable psychiatric and behavioral disorders[3,4]. At the time of this writing, MI is not a diagnosable disorder, but rather considered a syndrome associated with clinically-relevant levels of psychological distress, increased thoughts of self-harm and various mental illnesses, such as posttraumatic stress disorder (PTSD) and depression[5]. Much like the distinction between acute stress disorder and PTSD, moral distress is considered the short-term reaction to potentially morally injurious events (PMIEs), whereas MI refers to the persisting distress resulting from PMIE exposure[2]. PMIEs in the military context refer to singular, rare events that are out of an individuals' control and have deleterious effects on personal integrity or meaning-making abilities[6]. Litz et al. (2009) defined MI as "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" (p. 700). PMIEs can comprise of acts of commission or omission, by the affected person or those around them[6], such as accidental or unwarranted killing others or failing to prevent harm to civilians[3,7] or acts of betrayal and lack of support felt by trusted others. For instance, feeling unsupported by one's chain of command is a risk factor for development of MI in military personnel[1].

MI can manifest as feelings of guilt or shame, a sense of betrayal, anger, disgust, anxiety, helplessness, cynicism, loss of confidence, isolation, sadness, negative thoughts about oneself, about others, and about the world; all of which are frequently experienced in relation to the organization or system that put the individual into a morally compromising position[2,6,8]. Across all populations, MI is associated with lowered psychological well-being and symptoms of PTSD and depression[6]. MI may be considered a psychological work-related injury, meaning that other occupational groups that experience PMIEs as part of their jobs can also develop MI[1,9]. Although the majority of MI research has been conducted within military contexts, recent events have led to MI being studied within other occupations, such as within law enforcement, and healthcare workers (HCWs) within the context of the COVID-19 pandemic[7]. HCWs and their experiences of

MI, along with the causes and treatments specific to this occupational group, are the focus of this paper.

Healthcare workers (HCWs)

MI predominantly occurs in high-intensity work environments, but unlike military populations who periodically deploy to higher threat locations where PMIEs are common, HCWs experience more frequent PMIEs in the course of their day-to-day work, which can lead to cumulative harm[6]. This is sometimes termed moral residue, which is essentially when individuals are repeatedly exposed to morally threatening situations, similar to cumulative traumatization[6]. In the United Kingdom (UK), nearly a third of HCWs have reported experiencing PMIEs at work[1]. PMIEs in HCWs can exist at the individual level (such as risky or unethical treatment and lack of respect for patient autonomy), the organizational level (such as witnessing unethical behavior by colleagues or a lack of cohesion in decision-making), and the system level (such as governmental/institutional policies that are incongruent with providing optimal care e.g. chronic understaffing)[6]. PMIE exposure occurs during times of severe stress, and HCWs are especially at risk of experiencing MI during stressful periods when compared to other occupations[9]. As a result, moral distress and MI in HCWs can be experienced at the emotional, psychological, and even spiritual levels[6,9]. Symptoms of MI have been found to be strongly associated with higher rates of clinician burnout, psychological distress, and lower levels of self-reported wellbeing[2]. Risk factors for MI in HCWs include feeling psychologically, emotionally, or practically unprepared for dealing with PMIEs, and a perceived lack of support from upper management, similar to military populations feeling unsupported by their chain of command[1]. However, unlike military populations, who are often trained to proactively mitigate stressful circumstances, evidence suggests that HCWs are not as well trained to manage their potential exposure to PMIEs, including those resulting from long-term systemic challenges and the COVID-19 pandemic[1].

Causes of moral injury in HCWs

Systemic factors

HCWs are likely to be exposed to PMIEs due to the nature of their work[2]. While the pandemic likely increased HCWs' exposure to PMIEs, there is a dearth of research on systemic factors influencing PMIE exposure and MI in HCWs prior to the pandemic. However, the limited available research indicates that even prior to the pandemic, HCWs faced multiple challenges which provided a fertile breeding ground for the development of MI in HCWs, including chronic understaffing and lack of resources[10]. These challenges often result from the ethics of patient-centered care coming into conflict with the business model of healthcare delivery[6]. Healthcare organizations often view patient care through the lens of business and financial interests, which is not in and of itself problematic. It is potentially problematic when the business model comes into conflict with healthcare delivery, during times when HCWs are required to see more patients than they are able, especially with an inadequate amount of resources, and when the systems do not account for the toll these conflicting priorities can have on HCWs and patients alike[6]. Whether rightly or wrongly, many HCWs report feeling required to see more patients than they have the ability to adequately care for, and report feelings of being disposable and undervalued[6]. We of course accept that there is nothing inherently wrong with getting patients seen as quickly as possible, and ensuring that resources are used efficiently and without needless waste. But there is a fine line between efficiency and the perception of an overemphasis on meeting targets and maintaining public image of strong leadership[2].

It has frequently been cited that during the pandemic, HCWs experienced feeling guilt related to letting people down, often as the result of not being able to provide person-centered care and feeling complicit in a system that is less equipped to provide high quality care[2]. Even without the influence of the pandemic, HCWs frequently work long shifts, care for dying patients who might otherwise be able to be saved if there were more resources, make challenging medical decisions under extreme pressure, experience violence (physical or verbal violence from patients or patients' relatives), and are required to have emotionally charged conversations with grieving

or angry family members; these are all factors that have been found to contribute to MI[6,8,9]. Additionally, the onus is often placed onto HCWs to compensate for systemic failures by over-working themselves, leading to burnout, exhaustion, disengagement at work, and cynicism towards their organization[2,6].

Team factors

A lack of preparedness and perceived lack of empathy and respect from supervisors have been found to be potent risk factors for MI development[6]. Further, those without line-management duties report feeling guilty about the lower quality of care they were providing to their patients, and suppress their own needs in order to prioritize the needs of their patients above their own[2]. Similarly, those with line-management duties report feeling guilty about not having adequate resources for their staff and suppress their needs to care for their staff[2]. There is evidence that this has led to a general feeling of lack of fulfilment in work at both management and non-management levels, to HCWs not properly taking care of themselves, and to many HCWs leaving their profession entirely, further exacerbating the issue of understaffing for those who stay[2]. HCWs' workplace productivity also deteriorates as a result of experiencing MI symptoms causing even more adverse working environments[4].

Individual factors

More junior and less experienced HCWs have been found to be at elevated risk for higher levels of MI[6,8]. Certain roles are more likely to experience PMIEs, namely nurses and support staff who have frequent and prolonged contact with patients and who typically lack decision-making power; however, non-clinical HCWs such as administrators and those who do not provide direct patient care can still experience MI, indicating that this is not a syndrome solely affecting nurses[1,6]. Furthermore, nurses with diagnosed mental disorders and younger, female nurses are more likely to report all types of PMIEs, indicating that these individuals are most at risk of developing MI[1,6]. Additionally, when an unrelated and stressful life event occurs (for example, the death of a loved one), HCWs are more at risk for reporting MI following a PMIE than

they would be had that external event not occurred[11].Individual-, team- and system-level factors contributing to the development of MI do not exist independently, however, there are individual-level impacts that exacerbate the impacts at the team- and system-level and vice versa. For example, MI in HCWs leads to heightened anxiety and sleep disturbances, which has caused many HCWs to take sick leave to manage sleep and stress[2]. This has a knock-on effect at the team- and system-level, as the more HCWs who are absent worsens the issue of a stretched and overworked workforce[2].

COVID-19 impacts on moral injury

Within the context of the COVID-19 pandemic, there has been increased attention paid to HCWs experiencing moral distress and MI as results of repeated exposure to PMIEs[6]. There was vast public interest in HCWs during the pandemic which acted as a catalyst for some system-level changes to support HCWs' wellbeing, albeit mostly temporary ones. However, during the height of the pandemic, HCWs were exposed to additional myriad PMIEs, including younger and healthier (and therefore unexpected) patients dying on their watch, triaging patients beyond their normal scope, and feeling undermined and unsupported by organizational and governmental policies[2,11]. There is good evidence that HCWs have experienced clinically-relevant MI symptoms as a result of the system-level impacts during the pandemic (such as shifting allocations of resources), and that the pandemic possibly exacerbated existing organizational factors that contributed to MI[4]. For example, the pandemic compounded the need to work longer hours and to care for more patients with scarcer resources, leading to more extreme levels of exhaustion[4]. Further, due to the reallocation of resources to the frontlines of the pandemic, patients with unrelated health concerns often deteriorated and, in some cases, died[6]. This was associated with the HCWs who were responsible for their care experiencing increased levels of MI[6]. In many cases, there was also a system-wide lack of response to staff feedback suggesting improvements, which contributed to HCWs feeling that their organizations were not looking out for their wellbeing[2].

In the United States (US), the prevalence of MI in HCWs working on the frontlines of the pandemic was around 32%[2]. The occupational factors found to be significantly associated with development of MI in HCWs include being redeployed to cover other units, a lack of Personal Protective Equipment (PPE) for both HCWs and patients, an uncertainty of the transmissibility of COVID-19, high patient mortality, triage of scare resources, experiencing perceived lack of support from management and colleagues, having a colleague die from COVID-19, and perceived incongruent renumeration for the amount of sacrifice and work[1,4,9,12]. It has been found that HCWs working on COVID-19 units were more likely to report MI; most likely due to the lack of safety, uncertainty about their role (sometimes stemming from redeployment), fluctuating policies, and high patient mortality[6]. Further, HCWs in clinical roles struggled to balance their own physical and mental health needs and those of their close family members and friends with those of their patients, which has been found to significantly contribute to the development of MI[11]. Renumeration that is perceived to be incongruent with the amount of HCW sacrifice during the pandemic is also frequently cited as a reason for HCWs feeling resentful and unsupported[12].

Feelings of anger, betrayal, resentment, powerlessness, and a lack of trust in leadership were heightened during the pandemic; HCWs often felt that top-level management, organizations, government, and broader society were not taking their safety and needs into account[2,4,6]. These feelings led to MI symptoms such as anger, loss of trust, and an inability to forgive others[6]. Governmental or institutional policies being incongruent with safety and providing the highest level of care, such as a lack of PPE, were considered frequent PMIEs by many HCWs throughout the pandemic[6]. In terms of broader society, when HCWs saw the public participating in risky COVID practices, they felt their work and sacrifices were undermined, leading to feelings of resentment and anger[13]. There was regular applause for HCWs in many countries, which has been described as a good intention, but was frequently regarded as a ‘hollow gesture’ void of actual support for HCWs[14]. Additionally, HCWs were frequently labelled “angels” or “heroes” in the media, which implies invincibility and suggests that HCWs would not require care themselves[14]. Elevating HCWs beyond the needs of humans might be a barrier to help-seeking behavior[15]. It has also been suggested that being called a hero may be dangerous as it could

encourage individuals who are suffering to not speak up about their mental health difficulties[14]. Further, labeling HCWs are heroes and angels is perceived to bolster the notion that HCWs are doing their jobs out of the goodness of their hearts, not as a profession deserving of adequate compensation, e.g. hazard pay[12].

Methods for reduction of moral injury in HCWs

It might be tempting to say that HCWs should not be exposed to any PMIEs, but that would be as utopian as believing that soldiers should not be exposed to any physical or mental health risk. Essentially, the only way to avoid PMIE exposure is to prevent HCWs from properly doing their jobs. More practical and sensible is to first recognize that MI does not automatically follow any, or perhaps even most, exposures to PMIEs, and second, to concentrate on reducing the impact of PMIEs on HCWs. The most effective method to reduce MI amongst HCWs would be to tackle the many systemic causes such as ensuring adequate staffing, demonstrating the societal value of HCWs via adequate renumeration, making it possible for HCWs to rest and recharge (and actively encouraging this), and balancing taking care of staff with the business model of healthcare delivery[2]. However, in the absence of such systemic overhauls, there are a range of likely approaches to help mitigate HCWs' experiences of MI. It is noteworthy that the majority of the research to date suggests that the best way to fully address MI in HCWs is by addressing the root causes, although there are no easy tangible and practical steps outlined for addressing these[8]. When HCWs do experience MI, it is also critical that systems have structures and interventions in place to adequately alleviate symptoms and help HCWs recover effectively. At the heart of all of these methods is responding to the need for HCWs to be heard, validated, and supported by their colleagues, supervisors and employers.

Pre-exposure mitigation

One of the most often cited courses of action to proactively mitigate the development of MI in HCWs is by fostering a work environment that prioritizes their safety and wellbeing. Reframing MI in HCWs as a predictable occupational exposure can be a helpful way to manage

the associated risks. This could bring the management of PMIEs in line with the management of other occupational hazards, such as from blood-borne pathogens and tuberculosis exposure. It is certainly the case that HCWs deserve protection from MI just as much as other occupational hazards[9]. This may be achieved by adequately preparing HCWs, including psychologically, for their roles through the use of frank preparatory briefings about the nature of PMIEs that might be encountered, distributing clinical decision-making for patients across multiple members of the team, openly and honestly communicating policies and expectations from upper management and organizations to HCWs in a timely manner whilst providing sufficient resources and adequate pay, and visibly and genuinely valuing HCWs and their contributions[1,2,4,12]. Ensuring that HCWs can speak freely to their supervisors without fear of retribution or ridicule can help HCWs feel heard and validated and should be encouraged[11]. In the National Health Service (NHS) Staff Survey in 2022, over 1/3 of staff (38.5%) did not feel safe to speak up about any work-related concerns and over half (51.3%) of staff were not confident that their organization would address their concerns if they raised them, suggesting there is work to be done here[16]. Leaders who work with HCWs to problem solve their difficulties are perceived to be more trustworthy than those who only provide words of encouragement. Thus, empowering supervisors to have psychologically informed conversations with staff about any concerns and identify solutions to concerns can help foster supportive work environments[4]. Teaching supervisors in a singular four-hour lesson how to have regular and early contact with those they manage, how to have supportive and empathetic communication, educating supervisors on practical steps to steer their staff if they need more assistance, and encouraging help-seeking behavior were all found to be associated with fewer mental health-related absences from work in a randomized controlled trial[17]. Improvements in HCW supervisor confidence to have such conversations through a one-hour online training course has also been demonstrated[18]. Further, HCWs who had input into their decision-making about work expectations and patient care exhibited lower rates of MI than those who were not encouraged to voice their opinions[2].

When HCWs are more prepared for their roles, challenges, and consequences of these challenges and roles, they are less likely to report symptoms of MI[11]. Preparation of HCWs is

broad and can be applied in many forms, and the following examples are not an exhaustive list. Preparing HCWs for potential PMIEs that might be frequently encountered in their work during induction, and also in refresher courses at regular intervals, could be useful[2]. There are also proactive programs, such as Mindful Ethical Practice and Resilience Academy (MEPRA), designed for HCWs to practice mindfulness, ethical competency and confidence, resiliency, and work engagement, which claim to help prevent the development of MI[8]. If a HCW is redeployed, ensuring they feel comfortable and able to provide quality care within that new department can be achieved through mentorship by a colleague who has been in the role for longer[1]. Preparation can also take the form of training management to improve their active listening skills and feel more confident to better support their staff, and how to acknowledge feelings and take responsibility for outcomes if a PMIE does occur[1,18].

Post-exposure mitigation

There is no universally agreed upon method for retroactively mitigating MI. As MI is classified as experiencing moral dilemmas, rather than diagnosed psychological illnesses, it is critical to note that therapy and other evidence-based psychological illness treatments might not be the answer to the treatment of MI. Prior research has suggested that outcomes associated with PMIE exposure are distinct from, yet still associated with, PTSD, indicating that it might be helpful to treat MI with existing PTSD treatment, although this is certainly not a panacea for MI reduction[19]. Feelings of guilt are often difficult to address when associated with PTSD, are often the symptoms that linger following standard PTSD treatment[20]. Further, mental health professionals do not necessarily have the tools or skillset to adequately respond to morally and spiritually problematic scenarios, as this is not a standard aspect of their training, and clinicians are not experts on morality[21]. Incorporating those more poised to address elements of morality, such as military padres and/or pastoral/chaplaincy carers, common within healthcare settings, is putatively an important way to retroactively reframe and mitigate symptoms of MI[19]. This is a newer avenue for research, although a recent review highlighted the importance of having interdisciplinary teams of clinicians and spiritual advisors[19]. Further, research suggests that

chaplains can be an essential first point of contact, providing the initial screening of moral dilemmas, identifying those at risk for concurrent mental health concerns, and referring them to the appropriate mental health professional if needed[22].

Allowing HCWs to process their experiences is critical to retroactive mitigation, which can be achieved through formal and informal peer support groups, counselling, ethics support, and reflective practice groups[2,4,11]. HCWs who participate in peer support groups and reflective practice groups have consistently reported greater insight and understanding, which can be helpful for camaraderie, ventilation of emotional burdens, collective decision-making, and validation of experiences[11]. HCWs who successfully managed their moral distress and therefore prevented the development of MI often confided in a trusted other and were able to switch off from the distressing event[2]. Encouraging disclosure and providing a space for HCWs to disclose are critical to mitigation[2]. One example of a formalized peer support process, well used in healthcare settings, is trauma risk management (TRiM), which aims to actively monitor trauma-exposed staff, facilitate workplace support and encourage early referral of HCWs to professional support if their mental health remains poor[23].

Although there is no manualized and/or evidence-based approach for mitigating MI in HCWs, it is recommended that clinicians who treat HCWs with MI could use trauma-focused, compassion-oriented frameworks[11]. Even reminding HCWs that a PMIE is not their fault during disclosure of feelings may help mitigate MI[2]. It is also recommended that cognitive behavioral therapy (CBT) can help validate experiences while simultaneously challenging the cognitive distortions HCWs might face in relation to MI[11]. Mindfulness and compassion-based approaches may have a role in helping HCWs process anger, shame, and guilt through cultivating compassion towards the self, others, and the world[11]. For instance, studies have indicated that CBT and mindfulness-based interventions have helped resident doctors effectively manage stress and increase productivity, and similar theories have been applied to mitigation of MI across all healthcare professions[11].

On a macro level, having superiors take responsibility can potentially help aid moral repair[24]. Fostering forgiveness, both for the self and for others, can serve as mechanisms for MI

mitigation, which can occur when superiors offer meaningful and genuine apologies if they are responsible[24]. Essentially, this is due to the restorative justice nature of offering genuine apologies, and can work by "restoring or creating trust and hope in a shared sense of value and responsibility" (p. 427)[24]. Ensuring situations do not repeat by repairing the fractured trust in organizations and structures, as well as between individuals, has been found to be helpful for healing from MI[24]. One way the UK is attempting to do this is by setting up the UK COVID-19 Public Inquiry to examine the UK's response to the pandemic and to learn lessons for the future[25]. This inquiry is being conducted by an independent entity, with the input from those who were directly involved, including from many HCWs[25]. The results of the Public Inquiry will help inform recommendations for the future, will be influential in policy formation, and are a critical first step to fully understanding and addressing the impact that the pandemic had on the British NHS system as a whole and on HCWs individually[25].

Future directions

As the majority of research on HCW MI to date has centered on the pandemic, conducting longitudinal studies examining the long-term effects, and what to do about MI, is critical. Examining causes of MI beyond the pandemic is also an avenue for future research; for example, at the time of this writing, HCWs across the UK are striking for better pay and healthier working conditions[26,27]. As of mid-2022, in the UK the NHS is short of 12,000 doctors and 50,000 nurses and midwives nationwide, an issue that is likely to increase in the coming years and is present in many countries worldwide[28]. The current estimates indicate that one in nine NHS nurses are leaving the workforce, the majority not at retirement age but with years of work left[29]. This then becomes a cyclical issue: worsening understaffing can lead to increased MI, which can then cause more HCWs to leave their roles, thereby exacerbating the issue of understaffing further, and so on[6]. HCWs have stated that their pay, working conditions, and prolonged under-resourcing by the UK Government have caused substantial harm to them, which is likely causing significant distress and has the potential to cause MI[26,27]. Further, all research to date focuses on those who are currently in the field, but evidence suggests that HCWs who experience the

highest rates of MI elect to leave their professions, so conducting research into long-term impacts is also important[29]. There are currently no evidence-based treatments specific for the treatment of MI in HCWs, so a randomized controlled trial is necessary to develop a gold standard of treatment in this population. More research into preventative approaches is also warranted.

Conclusion

There is a pressing need to recognize that improving healthcare organizations' infrastructure will pay dividends in reducing MI, and associated formal mental health disorders, amongst HCWs. This can be achieved by providing reasonable working conditions including adequate pay, time for HCWs to rest and recharge, and providing clear and honest communication from superiors to adequately address MI mitigation in HCWs[2]. The systemic issues, which are the root causes of many PMIEs and therefore MI, did not start, and have not ended, with the pandemic. In many cases, the systemic problems continue and, in some case, have been further exacerbated since the pandemic has receded. Reducing exposure to PMIEs where possible, addressing systemic problems and using evidence-based prevention approaches and treatments for MI-related mental disorders are all warranted. Addressing MI is also warranted from a healthcare delivery viewpoint, as morally injured staff are likely to make less effective decisions and thus deliver less than optimal care.

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